



ACOUSTICS

CAPABILITY STATEMENT

WE COLLABORATE WITH:

GOVERNMENT

Providing functional and comfortable spaces for the community.

BUILDERS

Practical, buildable and cost-effective building services solutions.

ARCHITECTS

Achieving your vision of function and aesthetics.

DEVELOPERS

Navigation of planning pathways to create attractive spaces to deliver a return on investment.

PRIVATE BUSINESSES AND INDIVIDUALS

Delivering high quality, comfortable spaces.

CARE PROVIDERS

Attractive, saleable and commercially viable solutions, helping to minimise your risk.

PROJECT MANAGERS

Using a proactive approach, we excel when it comes to documentation and coordination of services.

HIGHLY SKILLED ACOUSTIC ENGINEERS

One of the key considerations of any new project are the acoustics. They can have a major impact on a number of factors, including human health and wellbeing, performance, communication and privacy.

We are passionate about design for sound and unique acoustic spaces, offering practical, cost-effective and timely solutions. We provide consultancy services in all areas of acoustics, noise, vibration control and audio-visual design.

Our work covers multiple sectors including residential, schools, aged care facilities, concert halls or commercial blocks.

With detailed measurements and sophisticated modelling technology, we deliver acoustic designs that seamlessly integrate with building services design and architectural vision.

From masterplanning and concept design, through to design completion and certification - we're passionate about performance and quality, and can help at all phases of construction.

For over 45 years, with multi-disciplinary teams or as a stand alone service, we have successfully delivered numerous acoustic projects working closely with architects, builders, developers, businesses and individuals.

We have diverse experimental and theoretical academic backgrounds which gives us the confidence to innovate effectively.

Our experience, communication and coordination skills, combined with our commitment to excellence in design, sets us apart.



CREATIVE SOLUTIONS

We invest the time to fully understand both your business and the project.

We approach every project with a wealth of knowledge and an open mind, and believe the most creative solutions come from a collaborative approach.

We encourage your input and ideas, and those of your design team, at all stages of the project.

We love what we do. And know the right questions to ask, to identify issues early - often saving you time and money.



INNOVATIVE DESIGN TOOLS

In addition to expertise and hardware, we've invested in expensive and sophisticated software for acoustic work and modelling - giving us an edge on other providers.

Consider the design of large auditoria, concert halls and theatres for example. Imagine being able to hear what something will sound like before a structure is complete.

Our special design tools enable us to create a 3D model. By combining this with a ray tracing algorithm, we can simulate how things will sound. Our highly trained acoustic team can alter the parameters to optimise the design for best acoustic performance and sound quality.

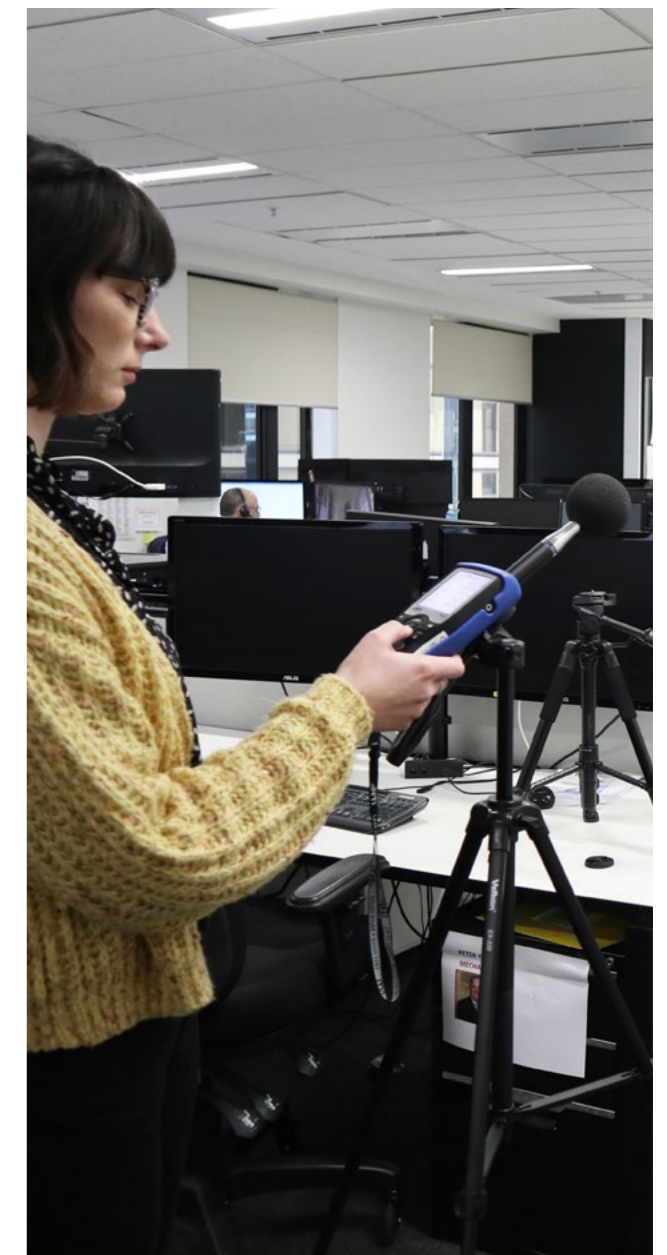


45 YEARS OF EXPERTISE

Established in 1976, Northrop is a locally-owned engineering consultancy with ten offices and over 400 people across NSW, QLD, VIC and the ACT.

Being employee owned, the team you work with has a direct investment in the success of your project, and you get to work with our most senior and talented people.

Our acoustics team is in the unique position of being able to draw on expertise from other building-related disciplines, including mechanical, electrical, audio visual & ICT, hydraulic & fire, ASP3 and vertical transport, as well as civil, structural and sustainability.



OUR SPECIALISED SERVICES

Our acoustics team is in the unique position to draw on expertise from other building-related disciplines, including [mechanical](#), [electrical](#), [audio visual & ICT](#), [hydraulic and fire](#), [ASP3](#) and vertical transport, [civil](#), [structural](#) and [sustainability](#). These are our acoustic specialities.



MECHANICAL NOISE
Mechanical and building services noise control, plant design.



TRANSPORTATION NOISE
Transportation noise, traffic, rail and aircraft.



ENVIRONMENT
Environmental noise impact assessments, residential, commercial and industrial.



COMPLIANCE
Building acoustics design, airborne sound insulation for partitions and floors, NCC compliance.



FAÇADE
Façade acoustics design, airborne sound insulation for facade elements including glazing.



ARCHITECTURAL
Architectural acoustics, design of auditoria and concert halls, optimisation for speech clarity and



"Northrop's acoustic team provided expert advice on Wilton Public School and has worked toward the common goal for the community. Collaboration, coordination and responsiveness are the benefits achieved from engaging a multi-disciplinary services company on this project. I highly recommend them for any acoustic project."

Elise Watson, Project Manager, MBB Group



EVERY DAY
Room acoustics, design and modelling of performance for everyday spaces, optimisation of acoustic parameters and internal finishes.



SPECIALISED
Specialised spaces, acoustic optimisation for AV services and specialist sound environments.



CERTIFICATION
Acoustic testing and certification for building elements, spaces and services.



ALL PHASES
Acoustics for all phases of construction, master planning, concept design, design development, detailed design, design completion and certification.



VIBRATION
Vibration design and monitoring for machinery, buildings and infrastructure.

OUR MULTI-SECTOR EXPERIENCE

Our projects span residential, commercial and fit out, hospitality, retail, seniors living and care, health, education, infrastructure, industrial, public domain. We partner with clients, providers, architects, project managers, and builders to deliver attractive, practical, future-proofed and resilient spaces, tailored to project requirements.

Click on the below images to read more about these projects, or read about our other projects [here](#).



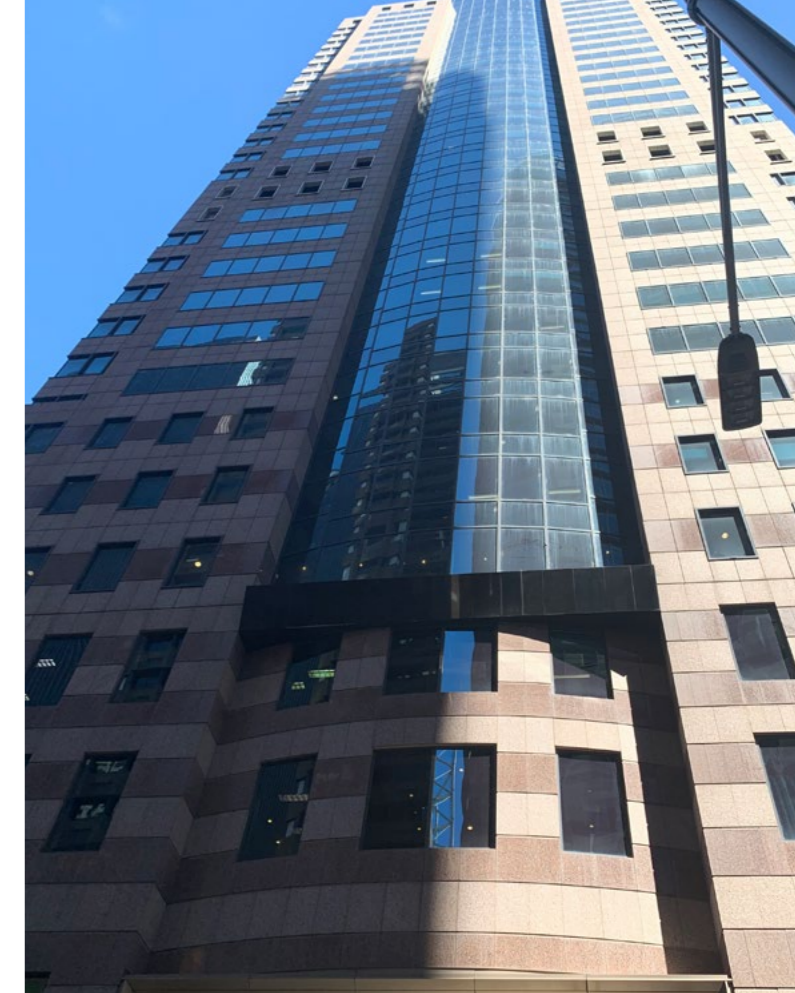
RFBI Hawkins Masonic Village



Chau Chak Wing Museum, Sydney University



University of Newcastle, Design Building



1 O'Connell Street, Sydney



Eric Tweedale Stadium, Granville



Moree Civic Precinct

"We expertly co-ordinate our multi-disciplinary consulting team service with excellent results as we are all under the one roof."



Peter Young
Principal | Mechanical Section
Manager | Mechanical Engineer



The Chancellery Boardroom, Western Sydney University



Powerhouse Museum Discovery Centre - *currently in construction*



Westmead Hospital Redevelopment



OUR EXTENSIVE EXPERIENCE

AGED CARE AND HEALTH

- Anglicare Nowra
- Casula Residential Aged Care Facility
- Coffs Harbour Health Campus Upgrade
- Eastlakes Shopping Centre, Eastlakes
- Kangy Angy Rail Maintenance Facility
- Minchinbury Manor Aged Care Facility, Rooty Hill
- MRI Rooms, Westmead Hospital
- Nepean Private Hospital
- Nowra Regional Health, Nowra
- Presbyterian Aged Care, Thornleigh
- Prince Henry Hospital, Little Bay
- Twilight Glades Bay Aged Care, Gladesville
- Uniting Aged Care Yamba
- Veterinary Hospital, Vineyard
- Wyong to Warnervale Pipeline, Warnervale

COMMERCIAL

- ARB Workshops, Wentworthville
- Arthur J. Gallagher Melbourne & North Sydney
- Barden Fresh Produce, Kemps Creek
- Dan Murphy's, Mosman
- Gap Bluff Centre, Watson Bay
- George Weston Foods office fit-out, North Ryde
- One Wharf Road, Sydney, instructure office fit-out
- Plus Fitness Jordan Springs
- PTW Architects Office fit-out, Aurora Place Sydney
- Service Station, Bourke St, Waterloo
- Sutton's Motors Homebush
- Sydney Trains Central Hub fit-out, Clyde
- Tesla Service Centre, Alexandria
- WestPoint Shopping Centre, Blacktown

COMMUNITY

- Community Centre, Jordan Springs
- Cooke Park Multipurpose Pavillion
- Darling Exchange Library
- Liverpool Baptist Church
- Rowe Street Carpark, Eastwood
- Sydney Dance Company

EDUCATION

- ACU North Sydney Campus Physio Laboratory
- Brigidine College, Randwick
- Chabad North Shore Childcare Centre, College Crescent, St Ives
- Eileen O'Connor Catholic College, Lewisham
- Fairfield Forum Childcare Centre, Fairfield
- Little Giants Childcare Centre, Oran Park

- Loreto Normanhurst Library
- Lucas Gardens School
- Macquarie University Central Courtyard
- Pymble Ladies College, Pymble
- Richmond High School Gymnasium and Hall
- Senses Child Care Centre, Milson's Point
- Shirley St Childcare Centre, Wollstonecraft
- St. Mark's College Performing Arts Building
- St. Rita's College Performing Art's Building
- TAFE Meadowbank
- UNSW Cliffbrook Campus, Coogee
- USYD Chau Chak Wing Museum
- UTS Graduate Research School
- UTS Proto Space
- UTS Touring Hall, Powerhouse Museum
- Western Sydney University MARCS Institute BabyLab, Westmead

HOSPITALITY

- Cake Wine Bar, Redfern
- Doltone House – Milperra
- East Leagues Club, Bondi
- Four Seasons Hotel, Sydney
- Huntsbury Hotel, Lewisham
- Karaoke Bar, Church St, Parramatta
- Kogarah Golf Club, Kogarah
- Langham Hotel Miller's Point
- RSL Club, North Ryde and Parramatta
- Sussex Street Hotel, Sydney
- The Highline – Bankstown
- West Sports Club, Croydon

INDUSTRIAL

- ACE Cryogenic facility, Kings Park
- BOC Gases, Lidcombe
- Joe White Malting, Minto
- Premier Mushrooms, Glossodia

RESIDENTIAL

- 23-27 Harold Street North Parramatta
- 38 Stewart Street Wollongong
- 68A Queenscliff Road, Queenscliff
- Dougherty Apartments, Chatswood
- Elaine Estate, Point Piper
- Parks Apartments, Oxford Street, Darlinghurst
- Poly Horizon Apartments, Epping
- St. Andrews College, University of Sydney
- Top Spring St. Leonards
- Wrights Road Apartments, Drummoyne

LEADING YOUR PROJECTS FOR SUCCESS

Our team brings a collaborative management style that embraces the client, and project stakeholders. With connected teams across our 10 offices, our network of local experts are committed to their community and where they work.



Jamshid Ameli

Senior Acoustics Consultant
BSC (MECH ENG) MSC (NOISE & VIBRATIONS) MAAS

Jamshid has a wealth of experience and has been in acoustic consulting for more than 10 years handling projects in environmental noise, transportation noise, mechanical noise and building acoustics. Jamshid's key projects include Moree Civic Precinct Update and Moorebank Intermodal.



Isabella Adlington

Acoustics Consultant
MArchSc (Acoustics) BSc (Physics) MAAS

Taking an analytical approach to projects, Bella focuses on finding the best design solutions and outcomes that are both practical and cost-effective for the client's needs.

Bella's key projects include Chau Chak Wing Museum and Macquarie University Central Courtyard.



Peter Young

Principal | Mechanical Section Manager | Mechanical Engineer
BE (MECH) CPENG NER M. AIRAH RPEQ

Peter has over 30 years of experience gained across Australia and South-East Asia. With this breadth of experience, he has worked with teams in multi-discipline leadership roles to develop concepts and deliver outcome focused results for clients. Peter's key projects include Westmead Hospital and Oakey Beef Exports, QLD.



Alan Margaritis

Associate | Electrical Group Manager | Electrical Engineer
Adv.Dip (Electrical) CPEng APL3 (FSD) NER MIEAust

Alan has been involved in the building and electrical industry for over 10 years. During his time in the industry, Alan has built a resume of certifications and accomplishments enabling him to project his knowledge into multiple project designs and career opportunities.





MULTI-DISCIPLINE
ENGINEERING
CONSULTANCY



CLIMATE ACTION COMMITTED
& CARBON NEUTRAL CERTIFIED



PEOPLE



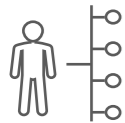
OFFICES ACROSS
NSW, ACT, QLD, VIC



YEARS SUCCESSFUL
DELIVERY



OWNED BY
OF OUR SENIOR
PEOPLE



REPRESENTATION ON ALL
MAJOR INDUSTRY BOARDS



MULTI-AWARD
WINNING



"Sydney Metro is an exciting project that will add a lot of value to the CBD, and it was great to help our clients protect themselves against any damages resulting from the construction."



Bella Adlington

Acoustics Consultant

1 O'Connell Street, Sydney

CREATING POSITIVE CHANGE FOR YOUR INDUSTRY



BUILDING
SERVICES



CIVIL



STRUCTURAL



SUSTAINABILITY

Northrop is a multi-discipline consultancy highly experienced in delivering projects in [Civil](#), [Structural](#), [Electrical](#), [Mechanical](#), [Hydraulic](#) and [Sustainability](#), with extensive expertise in emerging and niche engineering services. We customise our service offerings to work standalone or come together as a successful multi-disciplinary team.

We are passionate about leading change to create a positive legacy in the built environment and are [committed to climate action](#).

Established over 45 years ago, we are a locally owned company with an open management structure, employing over 400 staff across ten offices in NSW, ACT, QLD, and VIC. As a client of Northrop, you'll enjoy strong relationships with our people who can provide industry insights and strategic project advice to help you deliver business success. Our [people](#) are our strength.

The projects we undertake with you come in all sizes across a range of sectors and we have an exceptional track record of delivering award-winning, high value, pragmatic and successful solutions.



EVERY ASPECT OF YOUR PROJECT IS COVERED

1 PRE PURCHASE

- Feasibility study
- Utility infrastructure
- Project risk awareness

3 DA

- Budget estimates
- Client briefing
- DA documentation

5 CONSTRUCTION

- Review workshop drawings
- Periodic & defect inspections
- Review as-built drawings

2 CONCEPT

- Design calculations
- Major plant spatial
- Concept designs

4 DESIGN

- Design modelling
- Design documentation
- Certification

6 POST CONSTRUCTION

- Defect inspection & reporting



HELPING YOU REALISE THE FULL POTENTIAL OF YOUR PROJECTS

At Northrop we believe that by developing our people to their full potential, building longstanding client relationships and through our determination to make every project a success, we help our clients realise their potential.

CONTACT OUR ACOUSTIC SPECIALISTS TO FIND OUT MORE

Whether it's improving speech privacy in an office environment, minimising school noise for the surrounding community, ensuring that audiences hear every note clearly in a large concert hall, controlling rooftop mechanical noise impact upon the neighborhood, or designing a building façade to stop traffic or aircraft noise intrusion.

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BUILDING SERVICES



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