

#### **Architectural Acoustics Services**





Performance acoustics 🧭 Office and open plan 🏹 Educational spaces

#### **Design with confidence**

+61 7 2111 4803 ask@matrixacoustics.com.au

## **Education**



### High performance acoustics leads to high performance learning.

There are over 3.5 million students enrolled in schools throughout Australia. Numerous studies have concluded that the acoustics of the learning environment have a profound influence on the learning outcomes experienced by students. As classrooms move from a more traditional layout into flexible learning topologies and innovative learning environments, learning areas need equally innovative acoustic design.

With a comprehensive knowledge of the latest acoustics products, ultra-detailed acoustic field analysis systems and techniques, and decades of design experience, Matrix Acoustics delivers exceptional educational acoustic designs.

#### Why choose us?

Education facilities need a capable team who combine exceptional technical skills, and real-world implementation experience, and understanding of the detailed requirements to achieve a high performance learning space.

Our team will guide you through the whole process, from the planning and assessment phase through to the construction phase. We provide our ongoing support to help you keep your project on track.

When you work with Matrix Acoustics, we become part of your project team and we take on your project like it's our own.



We are expert at delivering internal acoustics that promote a learning environment including reverberation control, acoustic enforcement, and electro-acoustic enhancement.



Our in-depth understanding of noise transmission and mitigation means we provide you with highly cost effective solutions to noise intrusion sources such as road, rail, and aircraft noise.



Air conditioning and mechanical ventillation are often required to achieve an effective learning environment. We have extensive experience assisting clients meet noise and vibration emissions criteria.



# Image: PerformanceImage: Acoustics



### World class performance acoustics designed in Queensland, Australia.



#### Acoustic design

From the expansive ambience of cathedrals to the critical focus of the recording studio, Matrix Acoustics has delivered a vast range of acoustic designs. We have mastery of the tools and technology required for designing, modelling, auralising, measuring and testing. More importantly, we understand the interaction of performer and auditory stimulous and can create acoustic spaces that enhance and inspire. Whether designing a new venue, or retrofitting an existing facility, acoustic design is key to ensure the exceptional acoustic performance of your venue.



#### PA design and testing

Clean integration of sound reinforcement is another passion of Matrix Acoustics. We have designed PA systems for touring events and mega-stadiums, distributed systems for tunnels and public transport, and innovative systems such as stearable arrays for court rooms, and cardioid speakers for highly reverberant spaces. With full modelling, design and auralisation capabilities we can design a system to comply with the most stringent specifications, in the most challenging acoustic environments.



#### Event noise management and monitoring

Monitoring of noise emissions from events in real-time is a standard practice of Matrix Acoustics. The system allows us, or your operators, to keep an eye on proceedings to confirm compliance with site conditions. However, Matrix Acoustics provides much more when it comes to event noise management. With our extensive knowledge and experience with sound reinforcement and PA systems, we are able to provide ongoing noise management and mitigation advice to ensure that your patrons have the best event possible, whilst achieving compliance in the neighbourhood. We have assisted many venues such as concert venues, schools, churches, pubs and clubs, and outdoor events.



#### Electro-acoustic enhancement

Variable acoustics and electro-acoustic enhancement is a growing field in acoustics. This exciting integration of acoustic and artificial reverberation gives regular venues the opportunity to create inspiring performance spaces that can change their acoustics as required. The electro-acoustic system can simulate the crystal cathedral, or notradame for a choral presentation, and with a click of a button transform into Concertgebouw for a chamber orchestra, and then into the Blue Note for a jazz session. These systems need complete integration with the acoustics in order to function to specification. Contact Matrix Acoustics to discuss how we can incorporate this into your venue.

# Workplace acoustics

#### Sound creates our sense of space

You can feel the size and ambience of the area surrounding you by closing your eyes and just listening. Sound provides us with a complete 360 degree sense of our environment and this can be used to powerful effect when incorporated into workplace acoustic design.





Open plan offices can be a place of great teamwork, and at the same time provide sufficient discretion for everyday conversation. Intelligent design of collaboration spaces and meeting rooms enables them to achieve superior clarity for conversations that require high levels of fidelity. Common areas require a lively and energetic atmosphere to enhance engagement and community. And, private offices can be purpose built to achieve high levels of confidentiality and security.

#### The Matrix Acoustics difference

At Matrix Acoustics with over 30 years of combined experience, we know that co-operation and integration are critical to a successful outcome for all parties. We work in close collaboration with clients, architects, project managers, and other stakeholders to ensure seamless incorporation of acoustic designs, products and other acoustic solutions for the successful delivery of the project.

#### Source control

Control of problematic noise intrusion such as traffic, aircraft, rail noise is as critical as the internal acoustic design. Noise from building services such as air conditioning, lifts, switch rooms, and all the other components required to operate modern buildings also need control. With extensive experience in all sectors of noise control, Matrix Acoustics is able to develop completely integrated solutions for work places in all sectors.

Contact us today to discuss your requirements.

#### ask@matrixacoustics.com.au

Phone +61 7 2111 4803

2 / 193 South Pine Road, Brendale, Queensland, AUSTRALIA

#### Experience

- Office and open plan spaces
- Collaboration spaces
- Foyers and common areas
- Healthcare
- Hotels
- Gyms
- Retail
- Urban and city developments
- Civic and events

