



Acoustic Virtual Reality

HOW LOUD IS YOUR BUILDING?

When the design team tells you the right wall configuration could reduce noise leakage by 10 decibels, do you know what that actually means? Most people have no idea. How do you make an informed decision?

WE HAVE A CLEVER SOLUTION FOR THAT

We developed software that can demonstrate aurally how noises will sound within your building. You can also hear the level of noise likely to transfer - from one room to another, inside to outside or vice versa. We can demonstrate how loud the local bus will sound driving past your ground floor conference room before it's even built.

What's more, we can manipulate elements, such as internal surface finishes, room insulation or floor coverings, to identify the options that will make the biggest impact – all within a Virtual Reality environment.

It's 'Try Before You Buy' for your ears.

BENEFITS

- Get it right the first time minimises errors and risk
- Offers all parties a deeper understanding of the acoustic perception of the building
- Make informed choices about finishes and materials.
- Enhanced stakeholder engagement – attaining 'buyin' from parties through Virtual Reality
- Helps to streamline the approval process for funding

ACOUSTIC VIRTUAL REALITY

Using a game engine platform, we convert existing Revit models into virtual, explorable spaces. Moving around the rooms and corridors, we can demonstrate the difference that carpet or ceramic floor tiles will make to both the visual and sound design.



O CONFIDENTIAL CLIENT, BOARDROOM SETUP

The design of this signature commercial space, intended for multiple functions, presented challenges through the use of extensive glazing. We demonstrated the benefit of acoustic curtains using our immersive VR.

ACOUSTIC FEASIBILITY

Our software simulates the exact level of noise the building occupants – or even their neighbours – will encounter. You can test the effectiveness of partition walls to hear the sound experienced in neighbouring rooms or corridors. We've even modelled the cumulative acoustic properties for a mixed-use development to assess its impact on nearby residents. What's more, we can calibrate the software for any venue, so demonstrations can take place anywhere – your conference room, at the Planning office or at a meeting for local stakeholders.



🖉 CLUB JUBILEE ONE AQUATIC CENTRE

In a typically noisy environment, we used Acoustic VR to demonstrate the effects of including acoustic ceiling tiles in the space.

FOR MORE INFORMATION ON HOW ACOUSTIC DIGITAL ENGINEERING CAN HELP ON YOUR NEXT PROJECT, SEE YOUR LOCAL CONTACT:



MELBOURNE Daniel Castro Australian Discipline Leader, Principal P: 03 8554 7079 Daniel.Castro@stantec.com



SYDNEY Brandon Notaras Associate P: 02 8484 7041 Brandon.Notaras@stantec.com



BRISBANE Michael Lanchester Associate P: 07 3811 4543 Michael.Lanchester@stantec.com



PERTH Imran Khan Principal P: 08 6315 4717 Imran.Khan@stantec.com

We are driven to achieve

stantec.com