CASE STUDY



THE INNOVATIVE Q BUILDING ADVANCES UNIVERSITY OF NEWCASTLE'S CARBON NEUTRALITY AGENDA



Nestled between Hunter Street and the marina, Q Building is the first stage of the University of Newcastle's Honeysuckle City Campus Development. The cutting-edge establishment houses the School of Creative Industries and the University's Innovation Hub.

'The University wanted the building to represent their commitment to innovation to the wider community, and their ambition to achieve carbon neutrality by 2025,' explains Anthony Furniss, the Director of EJE Architecture, the multi-disciplinary design practice behind the development.

'Because of the orientation of the building, with a large northern facade, the original design saw the facade wrapped in a sun shade,' Anthony says. However, the solution didn't offer the desired transparency. 'We were after a technology that would stop the sun coming in when we needed it to, and offer plenty of vision of the internal structure when we didn't,' Anthony describes. 'SageGlass from George Fethers was the magic bullet.'

The innovative glazing solution tints dynamically in response to the intensity of the sun, which allows complete protection from harsh light and heat while providing full transparency when the sun moves or goes down. 'SageGlass enables the building to cool by reducing the amount of heat entering the building,' Anthony explains. 'That decreases the need for air conditioning and saves energy.' He adds that with the overarching design objective to showcase innovation and creativity within a highly energy-efficient building, SageGlass was the icing on the cake. As well as reducing greenhouse gas emissions, the tinted glass enhances occupant comofrot by reducing glare and helps maintain optimum temperature.

Driven by the environmental ambition and pioneering resolve from the inside out, the interiors of the building are defined by the mass use of sustainably sourced timber. The inner narrative generated by this decisive use of wood can be observed from the outside, with SageGlass allowing passers-by to peek inside the building.

Just as pedestrians can peek inside the building, the occupants can enjoy the expansive views outwards, a benefit enhanced by the option to grade the tint from the ceiling down to the floor. 'Being able to reflect among the business of creation is important,' Anthony says. 'The ability for students to look out, reflect on what they're developing and connect with the world on the other side of the glass enables them to come back into their creative mindset with more context.'

Similarly, the visitors, often from out of town, can enjoy sweeping views of the Newcastle cityscape, particularly the working harbour the building is adjacent to. "Having such a transparent building enables the University to communicate with their town and explain how the school fits in within the wider urban context," Anthony adds.

What is a highly considered, groundbreaking and functional solution from the occupants' perspective presents as a compelling display of innovation and creativity from outside. The building comes to life as the passers by can see the kinetic facade of the Q Building animate throughout the day, harmoniously responding to the change in the position of the sun.

The building has just been recognised for it's sutainaility credentials with a 6-Star GreenStar rating from the Green Building Council of Australia, becoming the first building in regional NSW to achieve the highest rating.

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