CASE STUDY:

Penola Catholic College Enhances Learning with Himmel Troldtekt Acoustic Panels

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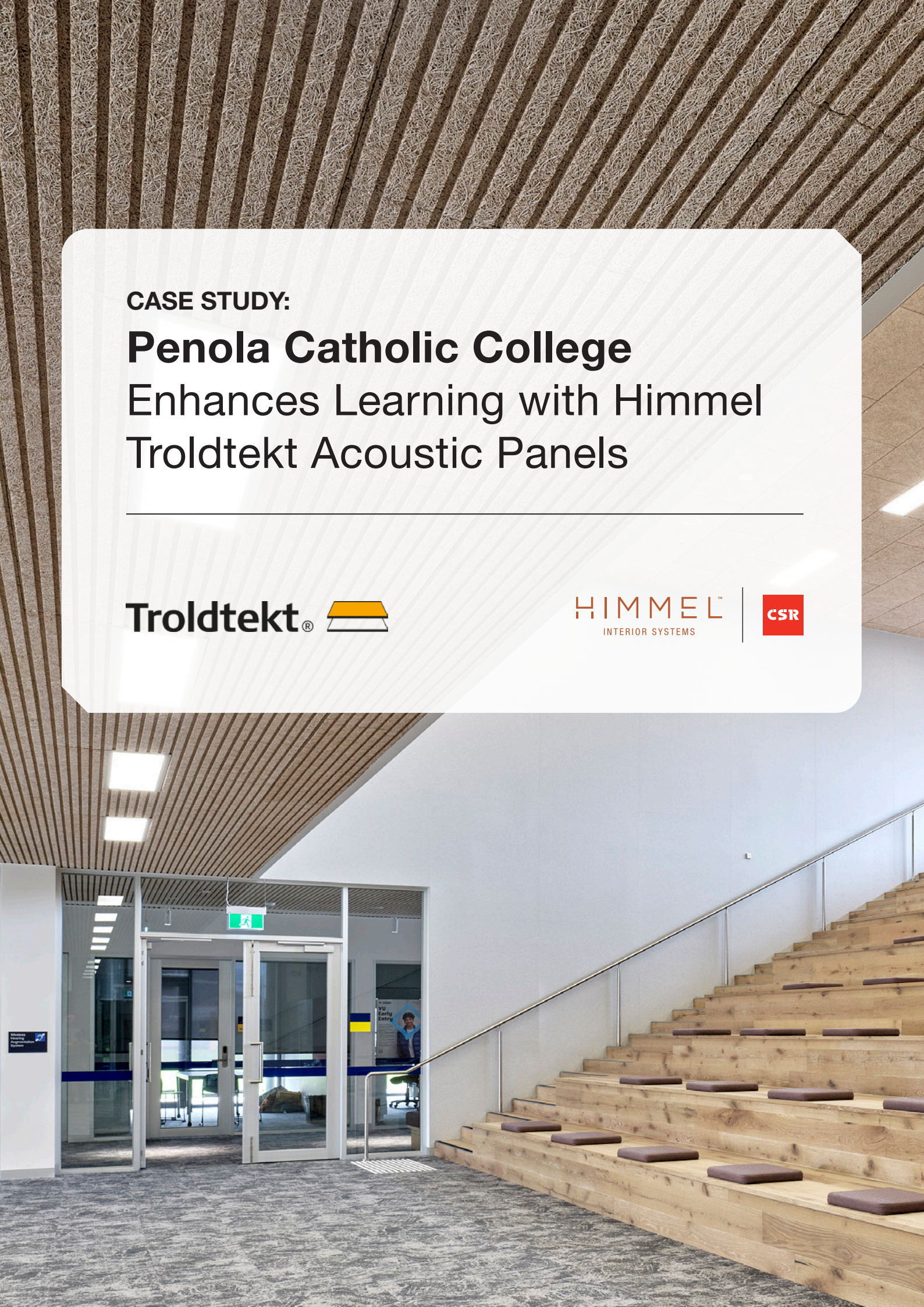

Nestled in the northern suburbs of Broadmeadows in Melbourne, Penola Catholic College is a thriving educational institution dedicated to creating an outstanding learning environment. To meet the growing needs of its Year 12 students for a mature and flexible learning environment, the college expanded its campus by adding a modern, university-style senior learning facility, designed to inspire both current and future students. The two-storey modular building, Annie Brice Building, located on the senior campus, offers contemporary spaces for Year 12 students, a careers hub, and gathering areas for lectures and social connections.

A key challenge in the project was addressing acoustic requirements in these new spaces. Large, open areas like hallways and auditoriums often struggle with echo and ambient noise, while classrooms need to maintain a focused, quiet environment conducive to learning.

The architectural team from McIldowie Partners, known for their expertise in designing human-centric and sustainable school buildings, turned to Himmel Troldtekt Design acoustic panels to solve this challenge. These panels, made from cement-bonded wood wool, are renowned for their superior sound absorption and design flexibility.

The installation of the ceiling and wall panels was completed within two months, and marked the first time Troldtekt Design panels were used in an academic setting, setting a new benchmark for acoustic quality, sustainability, and modern design in schools.

“Troldtekt Design acoustic panels offer exceptional sound absorption, while also being sustainable and durable. Their unique surface structure reduces reverberation, helping to manage noise effectively while adding a contemporary aesthetic the college was looking for,” says Tony Di Lorenzo McIldowie Partners.

For classrooms, an optimal Noise Reduction Coefficient (NRC) rating of at least 0.70 is recommended, meaning the material absorbs 70–75% of sound. Himmel’s Troldtekt Design panels, in combination with specialised insulation, can achieve NRC ratings of 0.90 to 0.95, significantly enhancing sound clarity and reducing echo.

The architectural freedom of Troldtekt panels goes beyond acoustics. The panels feature evenly spaced linear grooves that create a seamless, visually appealing look on ceilings and walls. The natural wood colour of the panels adds warmth, while the grooves create an interesting play of light and shadow, enhancing the spatial experience.

In addition to their aesthetic appeal and acoustic benefits, Troldtekt panels are designed for easy installation and maintenance. Pre-finished and ready to use, they eliminate the need for on-site painting. Their modularity allows for easy removal, facilitating future adjustments or repairs behind walls and ceilings, a critical advantage in large public spaces like schools.

The impact of the strategic acoustic planning has already been felt at Penola Catholic College. “We’ve seen a remarkable improvement in our learning environment, which is exciting as we continue to develop our campus,” said College Principal Tracey Kift.

Himmel Troldtekt panels are also FSC-certified, supporting sustainable forestry practices, and have a Group 1 Fire Rating for maximum safety.

For further information visit **himmel.com.au**.

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