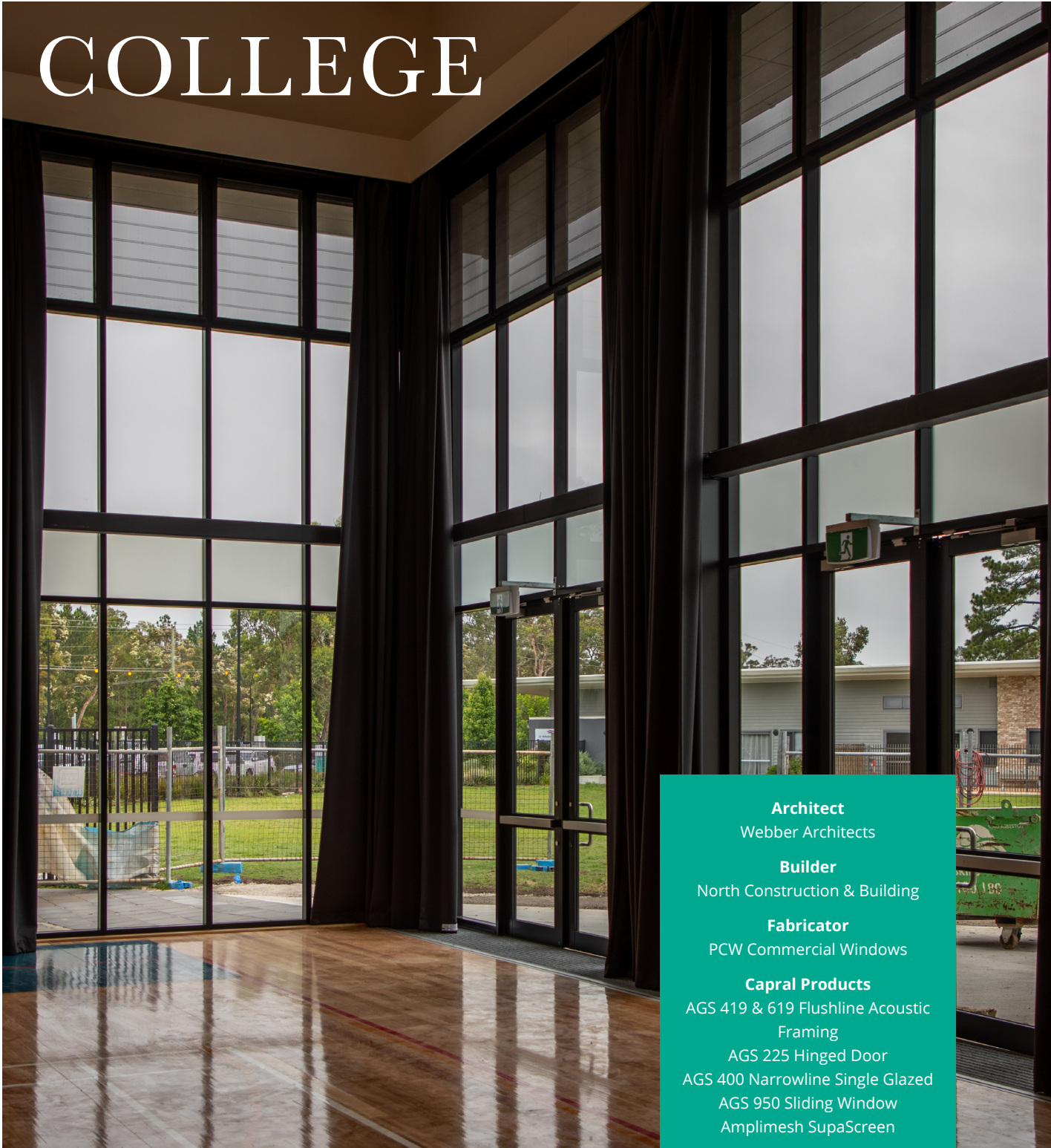


CATHERINE MCCAULEY

COLLEGE



Architect
Webber Architects

Builder
North Construction & Building

Fabricator
PCW Commercial Windows

Capral Products
AGS 419 & 619 Flushline Acoustic
Framing
AGS 225 Hinged Door
AGS 400 Narrowline Single Glazed
AGS 950 Sliding Window
Amplimesh Supascreen

CAPRAL
ALUMINIUM

ELEVATING EDUCATION

PCW Commercial Windows was proud to be the selected supplier of commercial glazing solutions for the entire project, demonstrating its expertise in managing the complexities of modern educational architecture.

Catherine McAuley Catholic College in Medowie is the newest secondary school in the Newcastle region, opening its doors to students in 2021. The college's construction spanned five stages, with the most recent stage completed in 2023. PCW Commercial Windows was proud to be the selected supplier of commercial glazing solutions for the entire project, demonstrating its expertise in managing the complexities of modern educational architecture.

The project's tight schedules and varied energy, acoustic, and structural requirements demanded precision and careful coordination. PCW's ability to provide value engineering throughout the project ensured that the client's exacting standards were met while adhering to budget constraints.

Catherine McAuley Catholic College was constructed over five stages, with PCW supplying and installing commercial windows, doors, and security screens across all stages. The latest stage involved five key buildings: A (Extension), E, F, G, and H. Each building posed unique challenges, from varying energy and acoustic requirements to complex structural demands. The tight project timelines added further pressure, requiring meticulous design, documentation, and management.

PCW's success in navigating these challenges earned them the trust of clients, architects, and builders. Their commitment to design and manufacturing excellence, coupled with effective value engineering solutions, ensured that the project was completed to a high standard, within budget, and in full compliance with the client's specifications.

PCW's efficient local fabrication and transport processes were integral to the timely completion of the project. Products were fabricated at PCW's Somersby factory and carefully transported to the site, with the team constantly monitoring timelines to anticipate and mitigate potential delays.

The windows were manufactured using Capral AGS Commercial systems, including the 400, 419-100 Flushline, 950, and 225 Series, chosen for their compliance with rigorous testing, technical support, and sustainability features such as LocAl® Green aluminium. Amplimesh® screens were installed for enhanced security, ensuring the safety of the school environment.

The complexity of the project, with panels exceeding 6 meters in height, required meticulous design and documentation, including steel, precast,

and shop drawings. This thorough documentation enabled early manufacturing, reducing lead times and pre-empting price increases. Stringent pre-manufacture inspections minimised defects, while careful transport protection maintained frame integrity. Onsite, regular toolbox talks ensured personnel safety amid changing conditions. PCW's integrated approach, from fabrication to site management, ensured the project was completed on time, meeting all quality and safety standards.

The project's technical demands were significant, with each window having to meet specific energy, acoustic, and structural requirements. This complexity was compounded by the variety of building types within the project, including both single and double-story structures, and the use of internal and external window frames, subheads, subsills, and angle trimmings.

For Building A, PCW utilised Capral's 419-100 Flushline, 400, 950, and 225 Series systems, all finished in Dulux Duratec Zeus Matt Black. The frames, some of which were over 6200mm tall, were bracketed back to the steelwork to ensure structural integrity. The glazing solutions included 10.38mm translucent, 12.38mm clear laminated, 6.38mm clear laminated glass, and



The project's technical demands were significant, with each window having to meet specific energy, acoustic, and structural requirements. This complexity was compounded by the variety of building types within the project, including both single and double-story structures, and the use of internal and external window frames, subheads, subsills, and angle trimmings.

6mm toughened louvres, complemented by Breezway® power louvres. Amplimesh® screens were installed for added security.

Building E required a combination of Capral's 400 and 225 Series, along with 619 Flushline Acoustic Framing, all finished in the same durable Dulux Duratec Zeus Matt Black. The acoustic demands were met with DGU glass, 10.5mm hush glass, and 6.38mm clear laminated glass. Breezway® power louvres and manual louvres were integrated into the design, with Amplimesh® screens providing security.

Buildings F and G featured similar configurations, with Capral's 400, 225, and EN4023 Series systems. The use of DGU glass, 10.5mm hush glass, 6.38mm translucent, and clear laminated glass ensured the buildings met both acoustic and energy efficiency





standards. Breezway® power and manual louvres were again utilised, and the structures were secured with Amplimesh® screens.

For Building H, Capral's 400 and 225 Series systems were used, along with DGU glass, 10.5mm hush glass, 6.38mm translucent glass, and clear laminated glass. Breezway® power and manual louvres enhanced the building's ventilation, and Amplimesh® screens ensured security.

PCW conducted stringent inspections and testing procedures throughout the project to ensure compliance with Australian Standards. This included meticulous documentation of Inspection and Test Plans (ITPs) for all products installed, ensuring that each component met the project's specific requirements.

Catherine McAuley Catholic College in Medowie is a shining example of how careful planning, precise execution, and innovative solutions can create a state-of-the-art educational facility. PCW's involvement in this project, utilising Capral's advanced aluminium systems and its own rigorous quality control processes, ensured that each stage was completed to the highest standards.

The success of this project highlights PCW's capability to manage complex, large-scale projects, from initial design through final installation. Their ability to meet the diverse energy, acoustic, and structural requirements while staying within budget and on schedule has established PCW as a trusted partner in constructing high-quality educational facilities.