

A CLASS ACT

Melbourne Grammar's latest building is a tri-level montage of steel, brick and glass; a striking contrast to the original 1854 bluestone school buildings. The huge glazed entry portal to the campus invites the outside in, symbolising the school's wish to make a new connection to the community.



Located in the leafy inner-city suburb of South Yarra, the Nigel Peck Centre for Learning and Leadership has seen the prestigious private school take a new direction not often seen in secondary school learning environments.

The centre provides a diverse, spatial experience that encourages different learning patterns, connecting student life with the city at large and making the activity of learning and education transparent to the wider community.

According to Melbourne Grammar headmaster, Paul Sheahan, this approach will extend to future developments at the school.

“With all new buildings we are trying to embrace the environment outside the school. Some aspects of the glass in the new learning centre make you feel like you could almost reach out and touch the outside world.”

“The school is not obsessed with continuing with the notion of bluestone; we believe it is more important to provide a stimulating environment for students, which we are able to do through contemporary alternatives such as the Nigel Peck Centre.”

John Wardle Architects were selected from five tenders to be awarded the architectural contract for the centre. Beyond their design, the headmaster says he was impressed by the firm's ability to “really capture the philosophical underpinning of the centre.”

While John Wardle Architects are well known for a number of university projects, this was the first time the firm had worked on a secondary school.

“We had a whole new age group to consider with young people aged 11-18. It's a building in which they will mature through and grow up with,” says John Wardle.

“Melbourne Grammar had a very clear brief. They considered it having a potential beyond being just a repository for books. If you look back at your own school days you can see how that idea of the library as a centre for technology has changed,” says Stefan Mee, joint firm principal and co-architect on the project.

Encompassing a total floor area of 2430m² over the three levels, the \$16 million centre incorporates a 240 seat theatre, administrative offices, meeting and classrooms and a two level library. Enveloped in glass, the centre offers powerful views back to the Domain which is a key part of the school's identity.

Long gone are the days of dreary, shadow filled libraries dominated by narrow aisles housing towering masses of books; the library in the Nigel Peck Centre is set over two levels and full of modern, light-filled interactive spaces .

Glass was given a leading role in building's design, a decision Paul commends.

“Glass is such a great material; it can provide a practical solution to issues such as insulation and natural light, while fulfilling aesthetic requirements at the same time.”

“If you look closely at the hatching pattern featured on some of the windows you will notice the pattern matches the pattern of the shield on the school’s coat of arms,” he says. “The hatching pattern is also very clever in keeping heat out.”

Viridian Heat Strengthened Low E glass and Viridian Enviroshield Performance incorporating Sunergy Low E laminate glass were the major two glass types used, with the glazing performed by Century Glass. In total, 1100m² of various Viridian glass products were installed into 31 separate window frames and four glazed roofs.

Multiple portal windows produce a series of vantage points rather than one single view and the year 12 study area is framed by a massive steel-framed picture window, consisting of 260m² of structurally sealed insulated glass units fitted to 32 steel window openings.

“Symbolically that window is orientated towards the larger, wider world that those students are on the verge of entering,” explains John.

One of the other unique aspects of the glazing is its configuration.

“We have tilted the glass in one

direction or another so that they are not only fragmented but both angled and inclined, which ends up altering the flat reflection so that in some you catch trees across the road and in others the sky,” says Stefan.



Not only is the project an aesthetic masterpiece but it is also environmentally sustainable, says John.

“The steel frame is reasonably deep and provides sun shading, so combined with the Low E glass and fritting you have a pretty effective response to solar loads.”

The glass work was not without its challenges; the two main glass panels that frame the year 12 study area weigh approximately 700 kilograms each, making them among the largest, perhaps the largest, insulated glass units used on any project in Australia. To install the IGUs required specially designed and engineered lifting equipment.

“This lifting rig took eight weeks from its design through to its fabrication and testing, and was critical to the successful installation of the IGUs,” says Shaun Purple, Century Glass Contracts Manager.

With minimal framing to the internal face of each of the massive steel picture frames, the challenge was to be able to lift and tilt the IGUs, with only 20mm edge clearance on all four sides and under everyday weather conditions. Any minor edge damage, due to loss of control during handling, would have had both severe cost implications and added five weeks to the project.

“The varying IGU sizes meant that each IGU had a different weight,” says Shaun. “A series of counterweights on an adjustable cantilevered arm enabled this equipment to be used on all 32 IGUs. What was initially the most difficult component of the entire project was installed over a 3 week period, without loss or damage.”

“All IGUs were then structurally sealed onsite, using Tremco two part structural silicone to enable fast curing, applied using a specialist pump,” continues Shaun.

According to John, cutting costs on the glass and brickwork was never an option.

“These are the first things that people notice so those are both time and money well spent because they represent a durability of the building per se and all of the workmanship and the joy in the making of it. Over time there will be maintenance and operational savings because those are very high performance materials.”

Paul has been delighted at students’ reactions, “The centre is a contemporary architectural icon and really embraces 21st century technology. For the students, it almost feels like they aren’t going to school, so different is it to the traditional school environment.”

“Enormous credit must be given to Melbourne Grammar’s James Burton, the builders and everyone else involved on their commitment to the project. The quality of work and the focus on the timing ensured there were no major disruptions to the schedule,” says Paul.

Taking approximately 15 months to complete, the centre was officially opened on Monday 7 April 2008, marking the school’s 150th anniversary.

For any additional information on the construction of the project, please contact the listed organisations.

Architect: John Wardle Architects, 03 9654 8700
Builder: Probuild, 03 9693 8222
Structural engineer: Connell Wagner, 03 8683 1333
Glass Supplier: Viridian, 1800 810 403
Glazing Contractor: Century Glass, 03 9879 5933/ Shaun Purple

Glass Specifications

Laminate: 17.52mm Viridian Heat Strengthened Low E
11.52, 13.52 & 17.25mm Enviroshield Performance
XIR 72-47 incorporating Sunergy Low E

Spandrel: 6mm Black opacified Low E

IGUs: 10mm Green Fritted heat soaked toughened/ 12mm Argon spacer / 13.52 & 17.52mm
Sunergy Low E Toughened