

Metallic steel plays starring role



Case study

Marist Auditorium, Newman College



The COLORBOND® Metallic steel colour Aries® – a rich, deep red with a touch of theatrical brilliance – plays a starring role in this new performing arts venue.

Putting on a stage play or a concert can be a difficult undertaking: one that is beset with challenges and obstacles, but which inevitably results in applause.

During the dress rehearsal phase for this new performing arts centre — builders were finishing the interior fit-out and landscaping was underway outside — EIW design architect Chloe Summers said she hoped the project would wow its audience at the official opening, timed to coincide with the start of the school year in 2016.

With bold feature walls that showcase COLORBOND® Metallic steel in the colour Aries® on three sides, the Marist Auditorium is already attracting attention. It combines teaching and performance spaces for drama and music students, and is the latest in a series of projects that EIW Architects has completed for Newman College in Churchlands, Western Australia.

The auditorium occupies one of the most visible locations at the school's Marcellin campus, which accommodates students from years seven to 12. "The performing arts centre sits on a prominent site on Empire Avenue, so we planned to provide a new contemporary face for the college," Ms Summers said. "We wanted to tie in the language of the existing buildings — which feature limestone colours and COLORBOND® steel in the colour Manor Red® — with a contemporary palette."

Giving the building the right appearance was as important as casting the lead role in a play. The architects carried out a rigorous process of research and analysis before choosing COLORBOND® Metallic steel in the colour Aries® for the feature cladding. This makes up about 50 per cent of the total cladding, and is visible to passing motorists and students playing on the college oval behind the building.

"We went through quite a lengthy process to select a colour for the feature panels: we looked at products for their durability advantages and colour range," said EIW project architect Tony D'Andrea. "We were favouring another product because at that stage the new COLORBOND® Metallic steel colour Aries® hadn't quite come to market.

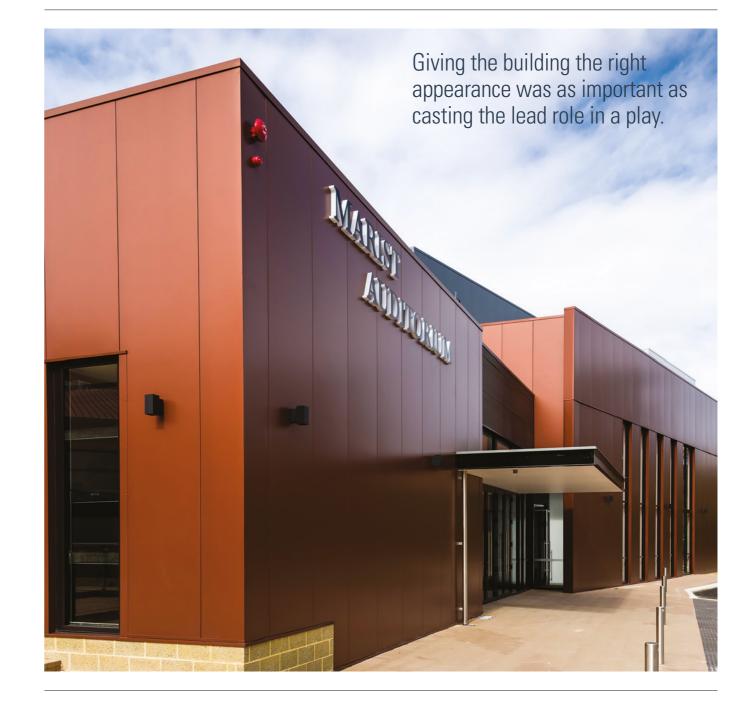
"Fortunately a member of the school's board mentioned COLORBOND® Metallic steel in the colour Aries® to us as a potential material option for this project," Mr D'Andrea said. "We then worked with BlueScope and Kingspan to see if we could use the COLORBOND® Metallic steel Aries® colour on the feature panels.

"Everyone collaborated really well to progress the testing and certification process," Mr D'Andrea said. "In the end, we found out that we'd be able to go ahead with the COLORBOND® Metallic steel Aries® colour late in the tender stage.

"With our mind set on COLORBOND® Metallic steel in the colour Aries® for the feature panels, we wanted to ensure that other facade materials wouldn't steal the limelight. Upfront construction cost and ongoing maintenance were strong considerations when resolving construction detailing," Mr D'Andrea continued. "It was apparent that a steel column-and-girt system was most efficient for the two-storey sections of the structure.

"Kingspan's Architectural Wall Panel Systems in Plank and Wave profiles finished the auditorium and stage upper wall sections," he said. "That was an economical option, and the easiest to maintain, and it gave us the contemporary look we wanted without the presence being too heavy."





Project details

Project: Marist Auditorium, Newman College Location: Churchlands, Western Australia Principal steel products:

Feature panels: Kingspan BENCHMARK Evolution made from COLORBOND® Metallic steel in the colour Aries®. Auditorium panels: Kingspan Architectural Wall Panel System in Plank profile (KS1000 PL FM) in the colour Portico Grey. Stage panels: Kingspan Architectural Wall Panel System in Wave profile (KS1000 WV FM) in the colour Gull Grey. High level parapets: made from COLORBOND® steel in LYSAGHT PANELRIB® profile in the colour Windspray®. Stage and auditorium roof: Administration roof: LYSAGHT KLIP-LOK CLASSIC 700® made from COLORBOND® steel in the colour Windspray®.

Architect: EIW Architects **Builder:** PS Structures.

Structural Engineer: Pritchard Francis Associates
Mechanical Engineer:

DSA Building Services Consultant

Electrical Engineer: Electrical Design Consultants

Hydraulic Engineer:

Cartwright Hydraulic Engineers

Acoustic Consultant:

Gabriels Environmental Design **Structural Steel:** Symonds Engineering

Roofing and cladding contractor:Covered Structures WA, supplied by Kingspan

Covered Structures WA, supplied by K
Client: Newman College
Project cost: \$10 million
Photographer: Tony McDonough



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This was the first time that building contractor PS Structures had installed Kingspan panels, according to project manager Vernon Houston. "From an installation point of view, the panels were quite straightforward," he said. "We just had to ensure the steel structure behind was installed properly."

Mr Houston said that even before the building was fully commissioned, it was obvious that the Kingspan panels made from COLORBOND® Metallic steel in the colour Aries® offered very good thermal performance.

"Even during the last stages of construction when the building wasn't fully operational, you could appreciate the way the panels protected the building from heat load," he said. "When you walk into the foyer from the outside you can feel a distinct temperature change."

Kingspan area manager Russell Hann said the company was consulted early on in the design process and specified product according to the architects' goals. "EIW Architects were keen for the cladding to have a strong visual impact so we were delighted when they chose the colour Aries® from the COLORBOND® Metallic steel range," Mr Hann said.

"This was the first time we had supplied COLORBOND® Metallic steel in the colour

Aries® into a project and it's turned out to be one of the best buildings we've ever done. It's a brilliant colour that's generating a lot of interest. I've since suggested to some other architects who were considering using the colour to go out to Newman College and they've all commented on how impressive it looks in the real world.

"The other thing was the insulation requirement. A large number of children and staff will be using the auditorium at the same time so it was important for it to be a comfortable temperature. Once we knew the R Values EIW was seeking for the building's interior, we were able to specify our BENCHMARK Evolution Axis insulated panels in the appropriate thickness — 50 millimetres, in this case.

"The panel also provided a semi-structural function in terms of its large spanning capabilities that allowed for the omission of a lot of structural steel such as girts," Mr Hann said.

With the curtain about to go up on this challenging production, Design Architect Philip Idle is confident the building will perform well, both functionally and aesthetically. "Auditoriums are challenging building types because they look simple but the underlying

systems – acoustics, electrical and mechanical – are complex," he said. "They all have to work together so as not to clash, for example by producing feedback through the sound system," Mr Idle said. "Architects are used to materials such as timber or plaster for acoustic performance, but are often pleasantly surprised at how effectively perforated steel can also diffuse acoustic reflections."

Mr Idle said EIW Architects is very proud of this project. "It looks sophisticated without being ostentatious, it feels great inside — all the proportions have been carefully designed — and we were able to keep the look and feel clean and simple while tackling all those underlying complexities.

"We also incorporated some playful elements and dramatic aspects in the design," he said. "Being in the spaces feels really good and this is also the feedback we're getting from the college. The client has been very positive."

Asked if COLORBOND® Metallic steel in the colour Aries® will steal the show, Ms Summers replied: "You do see the colour first, and the other panels are grey so it really stands out. We are excited by the completed design and it is testament to a collaborative design effort by all parties concerned."

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