

case study:

# Health and Medical Research Building (HMRB), Flinders University, Adelaide, SA

**Architect/Designer:** Architectus **Builder:** Hansen Yuncken Pty Ltd **Contractor:** GMR Interiors

**Products:**

**Board:** Createx, 13 mm Mastashield, 13 mm Soundshield, 13 mm and 16 mm Fireshield, 6.5 mm Curveshield, 13 mm and 16 mm Fireshield and 25 mm Shaftliner

**Metal:** Stud and Track for Wall system and Suspended ceiling system with hangers, TCR and FC

## background

Flinders University's new Health and Medical Research Building (HMRB) in southern Adelaide is a 22,000 sqm architectural landmark set to foster ground-breaking medical research. Designed by Architectus, this state-of-the-art facility seamlessly integrates cutting-edge research laboratories with collaborative workspaces and public areas, creating an environment that inspires innovation and accelerates the translation of research into real-world healthcare solutions.

Completed early-2024, the HMRB is destined to be a catalyst for collaboration, synergy and technological advancement, shaping the future of healthcare in South Australia.

## challenge

"The laboratory spaces are purposely built to accommodate dedicated and complex functionalities" said Luke Valente, Senior Project Coordinator at Hansen Yuncken, who has been involved with the HMRB's development for over two years. "This bespoke approach, coupled with the extensive building services, created wall and ceiling framing challenges."

The building's intricate design and network of building services, including extensive mechanical ductwork, required innovative solutions to ensure structural integrity and optimal functionality. Acoustic considerations were also paramount, given the need for quiet, focused environments for labs as well as the administrative part of the building. In addition, curved walls – a prominent design feature – further complicated the acoustic requirements.





## solution

Siniat, a global leader in innovative building solutions, was instrumental in addressing these challenges. Their extensive range of products, unparalleled technical expertise and collaborative ethos proved to be the best suitable fit for the project's unique requirements.

"Siniat's framing solutions and Molyvan's technical assistance was exceptional throughout the project," says Luke. Molyvan Lim, Senior Structural Engineer & Specifications Manager for Siniat, provided invaluable guidance and support throughout the project. "Molyvan always readily available to assist, and Siniat provided innovative framing solutions, particularly bridging techniques, to work around the extensive mechanical ductwork. Which mitigated requirement for additional structural steel support." Luke adds that the project required robust planning, and the project team worked with Siniat to develop more efficient wall and ceiling systems.

"Molyvan engineered everything and was fantastic to work with," says Seth Powell, Project Manager with GMR Interiors, the ceilings and partitions contractor on the project. "He did regular site visits to make sure we were adhering to Siniat's guidelines and happily provided engineering solutions when needed."

Acoustically, Siniat's Createx perforated plasterboard emerged as a star player. "Createx was specified to achieve sound absorption, meet NRC and open area requirements, and provide the seamless finish the designer envisioned," explains Molyvan. "It's a specialty acoustic product that combines creative design with CAPT'AIR® clean air technology and superior sound absorption, improving both acoustic comfort and indoor air quality."

Siniat's 6.5mm Curveshield was pivotal in bringing the rounded elements of the design to life. "We successfully used Siniat's Curveshield for the curved parts of the design and achieved a seamless transition between the perforated and curved sections," Luke adds. "GMR's

quality in flushing and patching the perforated board was outstanding."

In addition, Siniat provided a suite of other high-performance products, including 13mm Mastashield, 13mm Soundshield and Shaftliner plasterboards. "Plus, the 13 and 16mm Fireshield was used in applications where fire rating was required," adds Alby Kenney, Construction Manager with GMR Interiors. "There were multiple instances where we needed to have a fire-rated partition between rooms."

This comprehensive approach, backed by Siniat's full system warranty, gave the project team confidence in the building's quality and performance. In addition, ADX, the local distributor for Siniat, provided exceptional service, ensuring timely delivery and availability of products. "Dealing with one supplier streamlined the process and ensured consistency in specifications," explains Seth. Collaboration emerges as one of the most pivotal aspects that contributed to this project's success – and both Alby and Luke agree. "It was crucial, especially given the project's complexity," states Alby, and Luke adds that it was the most complex building he's ever been involved in. "It came with its challenges," he says. "But with GMR and Molyvan, nothing was too hard."

Siniat's contributions demonstrate their unwavering commitment to providing expert support and high-performance building solutions that cater to the evolving needs of the construction industry – and even the most complex of projects. By seamlessly integrating design aspirations with functional requirements, the project team has created a space that not only fosters groundbreaking medical research but also prioritises the well-being and comfort of its occupants. The building was officially opened in June 2024, and is set to be a beacon of medical research, innovation, and wellbeing in the heart of southern Adelaide.