

IMPACT RESISTANT SPANDEK® STEEL FOR NEW MEDICAL FACILITY



With the Tropical Health Research Facility at James Cook University's Townsville campus set to make a vital impact on global tropical health and disease control, the architecturally striking building is creating visual impact – and will resist debris impact – thanks to the proven strengths of LYSAGHT SPANDEK® cladding.

The Tropical Health Research Facility is one of three facilities funded by the Federal and Queensland governments in establishing the Australian Institute of Tropical Health and Medicine (AITHM) at the Cairns, Townsville and Thursday Island campuses of James Cook University (JCU).

Research undertaken within the AITHM is focused on health problems important to tropical Australia and the tropics world-wide. With Northern Queensland affected by endemic tropical diseases and part of a region where infectious diseases are exceptionally prevalent, the AITHM will be on the front line of infectious disease risk and response for Australia.

Townsville's Tropical Health Research Facility is a world-class infectious diseases research facility incorporating Physical Containment Level 2 (PC2) and Level 3 (PC3) laboratories and biological facilities, specialist laboratory support spaces and offices.

The Facility's primary function is in health security research - including the development of diagnostic tools and vaccines, and the identification of bacterial pathogens - with a focus on communicable disease diagnostics and control and on re-emerging bacterial diseases putting tropical Queenslanders at significant risk such as tuberculosis, melioidosis and Q fever.

Naturally, in a structure where safety and security are so critical, quality of workmanship and materials was crucial and the task of securely cladding the Facility was entrusted to Townsville-based cladding experts, Matz Roofing.

With over 20 years' experience in roofing and walling residential and large commercial projects, Matz Roofing prides itself on only using quality steel products from Lysaght and also on the quality of workmanship and service they provide in the harsh North Queensland environment.

However even with that experience, the task of cladding the five-storey building was a 12-month project and not without trials and tribulations, as the company's Director, Matt Newman, explained.

"Because it has laboratories containing vaccines and deadly diseases, the building is run at pressure, so we had to install a vapour barrier, a sarking layer, that fully sealed the building to stop any leakage," Matt Newman said.

"We used a wall wrap product before battening it out and sheeting it and on the levels where the labs are situated, before we battened out, we fixed two layers of LYSAGHT® .55 BMT flashing coil around the two entire levels as a debris impact barrier so that in a cyclone or severe weather event nothing could pierce through; that was very unusual."

With the necessary inner layers in place, LYSAGHT SPANDEK® steel cladding was then installed in the COLORBOND® steel colour Surfemist® on the roof and in the COLORBOND® Metallic steel colours Rhea™ and Celestian™ on the walls to enhance the striking design of the building.

With an attractive and contemporary trapezoidal profile, LYSAGHT SPANDEK® cladding is lightweight, strong and economical for roofing and walling in both commercial and residential applications, particularly in tropical climates, as the bold ribs offer high water carrying capacity.

However even more critically, particularly for this application, LYSAGHT SPANDEK® cladding has been debris impact tested and proven to perform in Lysaght's NATA accredited laboratory.

"Externally, about 70 per cent of the building surface is LYSAGHT SPANDEK® cladding, with the rest in concrete; because it's been debris impact tested by Lysaght, it was specified to ensure the Facility could withstand the worst that our tropical climate could throw at it – literally," Matt Newman stated.

With the unique design of the Facility demanding more from Matz Roofing than the average building, Matt Newman was pleased to have the trusted experience of Lysaght behind him once again.

“This was a pretty intricate project with a lot of windows and penetrations and a few funny angles, all on a five-storey structure, so there was definitely a lot in it which made for quite a lot of work and that work was made much easier thanks to Lysaght,” he explained.

“We have a great working relationship with the Lysaght Townsville team; they always get the gear to us when we need it, it’s always in good condition, and there’s good communication between us, which all makes a huge difference on a project.

“Because we were using COLORBOND® Metallic steel and it had to be rolled to order for the project, I worked closely with Lysaght to calculate the exact quantities needed and they were very helpful in ensuring we had enough product on hand, on time and in full, to cover all our needs across the project.”

Speaking to Matt Hardy, Lysaght’s North Queensland Sales Manager, it was obvious he and the Lysaght team were equally pleased to once again work with Matz Roofing, as they have done on many a project.

“Along with the LYSAGHT® .55 BMT flashing coil, we provided about 2,800 square metres of 0.48 BMT LYSAGHT SPANDEK® cladding for the AITHM Townsville Facility and, as always, it was a true pleasure to see it installed so meticulously and to such great effect by Matt Newman and his team,” Matt Hardy said.

“Theirs was no easy task, so we ensured we provided the quick turnaround they required and naturally, as always, took great care with production and delivery of the COLORBOND® Metallic steel cladding to ensure a flawless result on the project.

“Matt Newman and his team are great at those challenging jobs, and believe me, they do quite a few of them; it’s a pleasure to have such a strong relationship with a client who is so passionate about quality product and so patriotic about using 100 percent Australian material,” he concluded.