

Universiti Brunei Darussalam

Bandar Seri Begawan, Brunei Darussalam (2014)

PRODUCTS USED:

Krystol T1® **Krystol T2®**

OWNER:

Ministry of Education

ARCHITECT:

Arkitek Idris

CONTRACTOR:

Tobishima Corp.

READY-MIX SUPPLIER:

Buildcon Concrete

APPLICATOR:

BUE Construction

DISTRIBUTOR:

BUE Enterprise

BACKGROUND

The Universiti Brunei Darussalam (UBD) is recognized as Brunei Darussalam's premier institution for higher education, and for good reason. After all, they are committed to providing a world-class education to the more than 2,800 students who attend annually. It's why they host 10 faculties and seven research institutes and have even been ranked as the 118th top university out of the 5,984 universities in Asia.

With such dedication to the quality of their services, it wasn't long before the university decided to expand their health sciences institute. As a result, the institute would no longer focus solely on medical training. Instead, it would include graduate programs for primary health care and public health and undergraduate programs in medicine, biomedical sciences, and nursing and midwifery.

This expansion in program offerings necessitated the extension of UBD's campus, which included a new building altogether. To ensure the building reflected the university's same care for health sciences, UBD's design for the new building had a keen emphasis on sustainability. That led to a design with energy-saving solutions such as exposed concrete floors, automated light controls, and a rain harvesting and recycling system. The design would not be restricted to just those features, however. Both UBD and their construction team were determined to apply the same sustainability concept to the expansion's concrete waterproofing system.

SOLUTION

To ensure their chosen waterproofing system would be sustainable, the construction team reviewed the green credentials of every potential product.



SMART CONCRETE®



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Eventually, they found Kryton's Krystol T1 and Krystol T2, which they were delighted to realize had been in numerous successful projects with similar conditions to the region of Brunei Darussalam. More importantly, the Krystol® technology that the solutions had would create a watertight waterproofing system with all the sustainable aspects the Ministry of Education was looking for. That included helping buildings earn valuable LEED points by using non-volatile organic compounds, eliminating the need for environmentally harmful petroleum-based membranes, minimizing worksite waste, and enabling concrete to be recycled at the end of its service life.

In short, both Krystol T1 and Krystol T2 seemed both reliable and fully sustainable. It encouraged the university and their construction team to apply over 2,850 m² (30,677 ft²) of the solutions to the new building's roof and gutter areas and moisture-laden areas, such as the toilets and pipes and M&E plant. The application went smoothly and is still performing to the sustainability standards set during the planning stages of the UBD expansion.

