PROJECT NAME	LOCATION	DESIGNED & INSTALLED BY	PRODUCTS USED
St John's College	Hamilton	Whitmarsh Architects & Mark Hassell of As-Spec Limited	- Highline 05 Crosses 4500mm x 3000mm - Baseline 02 & 22W RGBW LED Strip - Custom Panels with 12W RGB Strip

PROJECT SCOPE

MANAGED BY HARALD GIFFELS
COMPLETED | 2023

Whitmarsh Architects were charged with re-developing a large building on the road frontage of Saint John's College campus and the Independent Learning Environment conversion. A large part of the development idea was creating external corridors, freeing up internal floor space for more useful purposes. Another aspect of the brief from the client was to improve the aesthetics and street appeal of the building. These exterior walkways and verandas were to be held up by the supporting pillars.

The focus of the project was to enable simple installation and full access for maintenance and the use of Casambi wireless control across the project.

The external pillars and the cross luminaires within the building are forming a single Casambi network. The purpose of this design is to ensure the robustness of the network where Casambi nodes will connect to the nearest functioning unit in the scenario that a single node goes offline.

The crosses illuminate the Independent Learning Environment and are wrapped around by the freshly illuminated exterior. Completed fixtures comprising of RGBW ribbon and Baseline 02 Profile were sent to site and installed into the premade cavity in the back of the pillar and ceiling. The contractor simply installed each fixture and wired back to the IP65 enclosure which held all the DALI drivers and Casambi interface.

One of the main challenges was how to install the panels into the steel structure of the pillars keeping in mind future maintenance. Early in the project, a mock-up was created to determine the correct spacing for good light uniformity. All of this could only be finalised when the pillars were built, and a test panel installed. This discovery work resulted in backlit elements being built and customised depending on the laser cut imagery that was being illuminated reducing waste.

Each pillar had a unique set of panels marked 1-8. Each of these panels had a connection lead with plug and socket that goes directly to the related control box. The IP65 encapsulated control box is in the middle of the pillar for ease of access and houses all the DALI gear and Casambi nodes. The Casambi was set to have 8 channels to separately control the separate elements laser cut into the steel pillars. The rear of the pillars is lined with wooden panels that can be removed for maintenance of the services housed in the structure. The Backlit panels were all slid into place from a central access point at each pillar.