

Eunoia Junior College Singapore

PROJECT Eunoia Junior College

LOCATION Singapore, Bishan

CLIENT Ministry of Education

ARCHITECT CPG Consultants Pte Ltd START OF CONSTRUCTION March 2017

COMPLETION December 2019

LENGTH 103 m

WIDTH 45 m HEIGHT 56 m

NUMBER OF FLOORS 10 sty & 12 sty

USABLE FLOOR AREA 3,808.98 m² (per floor)

GROSS FLOOR AREA (GFA) 51.502.6 m² STRUCTURAL ENGINEER CPG Consultants Pte Ltd

M&E ENGINEER CPG Consultants Pte Ltd

In 2019 the first building project using CREE in Asia is completed

2019 saw the completion of the first building project using CREE in Asia. The result of a collaboration with local partners Kimly Construction and Lian Ho Lee Construction in Singapore, the impressive building houses Singapore's first high-rise junior college.

The use of Mass Engineered Timber and the CREE hybrid slab system not only contributed to heightened construction productivity, but the resulting open spaces, integrated greenery, and tranquil environment offer students the ideal surroundings for building a successful professional future.





Facts

LOCATION

located next to 62 ha Bishan-Ang Mo Kio Park and Kallang River

ARCHITECTURE

singapore's first 'highrise' junior college, first School in Singapore with an elevated stadium, extensive greenery with rooftop garden, expansive open spaces and greenery lining on walls, multiple floors of school separated with green spaces that are accessible for staff and students

SUSTAINABLE

ELEMENTS CLT Façade and Cree Hybrid Slabs

LAND USE

optimal land usage with smaller footprint compare to conventional school building

CARBON FOOTPRINT DURING CONSTRUCTION STAGE

reduce in carbon footprint with the use of CLT Façade and Cree Hybrid Slab, prefab Precast Sustainable Wall, extensive use of environmentally friendly construction materials such as Recycled Concrete Aggregates and Washed Copper Slag

ENVIRONMENT-FRIENDLY BUILDING

achieved BCA GreenMark Platinum, high Performance water cooled system with design system efficiency of 0.58 kW/RT and VRV system of 0.7kW/RT, no west facing façade for non-air conditioned areas, rainwater harvesting for irrigation

NATURAL VENTILATION

CFD simulation during design stage to ensure well ventilated classroom with adequate fresh air supply

OPERATING COSTS

usage of high efficiency LED and T5 lighting with energy savings of 51.09 %, energy usage monitoring system