

WALNUT PARK ELEMENTARY SCHOOL

Smithers, BC | Completed 2021

Role of the firm: Structural Engineer of Record

Area: 43,055 ft² (4,000 m²)

Budget: CA\$34 million

Architect: KMBR Architects

Client: School District No.54 (Bulkley Valley)

Sustainable Features: LEED Gold

Designed with a strong emphasis on 21st-century learning, the new Walnut Park Elementary School in Smithers, BC aims to provide a better, healthier, and more flexible learning environment for 440 students from kindergarten to grade seven, plus a community daycare centre.

The 2-storey building is divided into learning neighbourhoods, each of which consists of several classrooms arranged around communal gathering areas. The school also features a 2-storey gym, tech rooms and a learning commons located on the second floor to serve as a venue for social activities, presentations and informal learning.

A hybrid mass timber system was chosen for the construction, as it offers a sustainable, flexible, and visually pleasing solution while providing superior seismic, acoustic and general safety performance. The building's gravity structure consists of a composite metal deck over glulam beams supported by steel Hollow Structural Sections (HSS) columns. Furthermore, the lateral design featured ply sheathed shear walls constructed within the steel/glulam post and beam structure.

Following the latest philosophies for planning modern and collaborative educational buildings, classrooms and communal spaces are built to adapt to students' changing needs and support different learning methods. Together with the circulation areas that provide physical and visual connection, the design aims to encourage student interaction and foster a positive school culture.

