



PHOTO CREDIT: Christophe Benard Photography



MILL CREEK SCHOOL

ABOUT THIS PROJECT

LOCATION

Edmonton, AB

SMITH + ANDERSEN SERVICES PROVIDED

Mechanical

SIZE

36,587 sq. ft. (3,399 sq. m.)

BUDGET

\$11.5 Million

COMPLETION YEAR

2019

SUSTAINABILITY

LEED® Silver

ABOOT THIS I MOSECT

+ The first 21st-century learning centre in Alberta, providing a high-quality elementary school to replace an existing 72-year-old building.

- + Delivered through the Integrated Project Delivery (IPD) method, with capacity for 350 students instructed in both english and spanish.
- + Created a room air distribution and piping strategy that allows for future potential wall relocations (an important feature of flexible, scalable, 21st-century schools).
- + Utilized overhead displacement to reduce ductwork in the walls.
- + Design included a water heating system that reduces energy bills and carbon footprint, and a single dedicated outdoor air system with displacement ventilation.
- + Outdoor air system significantly reduced both capital and operational mechanical expenditures.
- + Gymnasium serviced by a dedicated recirculating air handling unit, which reduces energy usage and enhances indoor air quality.
- + Domestic hot water distributed by energy-efficient electric hot water tanks.
- + Zone terminal boxes in high traffic areas adjust the air volume based on the temperature demand and carbon dioxide levels. Through installed sensors, terminal boxes also have the ability to turn off when a classroom is not occupied.

HOT BUTTONS

ELEMENTARY

NEW BUILDING

IPD

LEED SILVER

REPLACEMENT

ENERGY EFFICIENT

MECHANICAL DESIGN

HEAVY TIMBER



