



Smith + Andersen
 Mechanical and Electrical





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DIK TIY INDEPENDENT LIVING FACILITY

ABOUT THIS PROJECT

- + Three-storey residential building, accommodating seniors and persons with disabilities across 19 affordable housing units.
- + Achieved Passive House certification (the first Passive House certification in BC).
- + Designed mechanical and electrical systems to have minimal impact on the building in order to meet the rigorous Passive House standards.
- + Minimalist design approach helped minimize the energy used for heating and cooling, improve comfort and air quality, and reduce utility costs.
- + Mechanical design featured an ultra-efficient centralized heat recovery ventilation system.
- + CO2 heat pumps were installed as the primary source of hot water (with electrical backup).
- + Adjusted the design to operate in the extreme cold (due to the minus 30 degree Celsius temperatures experienced in Smithers).

LOCATION Smithers, BC

SMITH + ANDERSEN SERVICES PROVIDED Mechanical, Electrical

SIZE 13,993 sq. ft. (1,300 sq. m.)

BUDGET Confidential

COMPLETION YEAR 2017

SUSTAINABILITY
Passive House Certification

AWARDS Georgie Award, Best Certified Project (2020)

HOT BUTTONS



PASSIVE HOUSE

MECHANICAL DESIGN

ELECTRICAL DESIGN



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