

Modular Building

BC faces a growing housing supply and affordability gap. Communities are searching for solutions to accelerate the construction of new housing. Modular housing is a construction method that uses building modules that are built in-factory, then combined on-site. This method requires less on-site construction labour, which can speed up the construction process. The adoption of modular buildings is still relatively new in BC, and research on whether modular buildings are resilient to the effects of climate change is needed. However, the advantage of quick on-site construction provides several benefits for communities that experience short construction seasons and need quick and effective solutions to rebuild after extreme climate hazard events.

Modular homes are **flexible** options that can be built with **moisture** and **fire-resilient** materials.

However, **overheating** is a common concern, and building quality is highly **variable** based on the materials and design used.

Wildfire



Can be built with fire-resistant materials.

Rain and Floods



Can be built with moisture-resilient materials and/or constructed on a high foundation.

Windy



Performance depends on strength of connections.

Extreme temperatures



Heat loss and overheating depend on exterior insulation.

Seismic



Mixed seismic performance depending on design

