

2017 WOOD DESIGN AWARDS - WINNER

Environmental Performance

Bella Bella Passive House, Bella Bella

Vancouver Coastal Health Authority, represented by: Brett Crawley, Vancouver



“Using off-site modular wood construction in a remote northern location resulted in limited on-site waste for a significant reduction in its environmental impact. The prefabricated wood design could be easily replicated across Canada. Wood plays an important role in obtaining Passive House standards.”

- jury comments

Photos – all Courtesy:
Wood Design Awards in BC
High resolution images
available. Please e-mail
mmclaughlin@wood-works.ca

Canada's first modular Passive House, built by Britco for Vancouver Coastal Health Authority staff housing, reduced energy costs and greenhouse gas emissions by 80 per cent during occupancy of the building using design principles such as such as super insulation, air tightness, elimination of thermal bridges, triple-pane windows and heat recovery ventilation. Building with wood played a significant role in reaching Passive House standards since the lower thermal conductivity of wood helps prevent thermal bridging. Wood is also a natural insulator and insulates an estimated 400 times better than products like steel. It is estimated that one unit of this townhouse complex could be heated by six 100-watt light bulbs on the coldest day of the year. Wood and modular techniques further decreased the environmental impact because wood uses less energy than most other building materials and off-site modular construction produces less material waste, requires fewer material deliveries (reducing the carbon footprint further) and reduces dust, noise, air and water pollution when compared to traditional on-site construction methods. Through projects like these, Britco strives to make the benefits of living in a Passive House accessible to people throughout the province.