

Passive House Verification



Architecture: **Randy Bens Architect**
 Street: **1833 Edinburgh Street**
 Postcode/City: **V3M 2X2** **New Westminster**
 Province/Country: **British Columbia** **CA-Canada**

Energy consultancy: **RDH Building Science Inc.**
 Street: **224 W 8th Avenue**
 Postcode/City: **V5Y 1N5** **Vancouver**
 Province/Country: **British Columbia** **CA-Canada**

Year of construction: **2017**
 No. of dwelling units: **1**
 No. of occupants: **3.3**

Building: **Rodgers Passive House**
 Street: **2945 Colwood Drive**
 Postcode/City: **V7R 2R3** **North Vancouver**
 Province/Country: **British Columbia** **CA-Canada**
 Building type: **Single Family dwelling**
 Climate data set: **CA0003d-Vancouver**
 Climate zone: **3: Cool-temperate** Altitude of location: **86 m**

Home owner / Client: **Adam Alteens**
 Street: **2945 Colwood Drive**
 Postcode/City: **V7R 2R3** **North Vancouver**
 Province/Country: **British Columbia** **CA-Canada**

Mechanical engineer:
 Street:
 Postcode/City:
 Province/Country:

Certification: **MIZU Passive House Consulting**
 Street: **2010 Dublin Street**
 Postcode/City: **V3M 3A7** **New Westminster**
 Province/Country: **British Columbia** **CA-Canada**

Interior temperature winter [°C]: **20.0** Interior temp. summer [°C]: **25.0**
 Internal heat gains (IHG) heating case [W/m²]: **2.2** IHG cooling case [W/m²]: **2.2**
 Specific capacity [Wh/K per m² TFA]: **60** Mechanical cooling:

Specific building characteristics with reference to the treated floor area

				Alternative criteria		Fulfilled? ²
				Criteria	Alternative criteria	
Space heating	Treated floor area m²	390.7				
	Heating demand kWh/(m²a)	10.25	≤	15	-	yes
	Heating load W/m²	8.30	≤	-	10	yes
Space cooling	Cooling & dehum. demand kWh/(m²a)	-	≤	-	-	-
	Cooling load W/m²	-	≤	-	-	-
	Frequency of overheating (> 25 °C) %	0.7	≤	10		yes
	Frequency of excessively high humidity (> 12 g/kg) %	0	≤	20		yes
Airtightness	Pressurization test result n ₅₀ 1/h	0.6	≤	0.6		yes
Non-renewable Primary Energy (PE)	PE demand kWh/(m²a)	48.81	≤	-		-
Primary Energy Renewable (PER)	PER demand kWh/(m²a)	21.56	≤	45	30	yes
	Generation of renewable energy (in relation to projected building footprint area) kWh/(m²a)	33.09	≥	60	32	

² Empty field: Data missing; '-': No requirement

I confirm that the values given herein have been determined following the PHPP methodology and based on the characteristic values of the building. The PHPP calculations are attached to this verification.

Passive House Plus? **yes**

Task: **1-Designer** First name: **Sherman** Surname: **Wai**
 Issued on: City:

Signature: