

Passive House Verification



Architecture:	DYS Architecture	
Street:	260 - 1770 Burrard Street	
Postcode/City:	V6J 3G7	Vancouver
Province/Country:	BC	CA-Canada
Energy consultancy:	RDH Building Science	
Street:	500 - 3795 Carey Rd	
Postcode/City:	V8Z 6T8	Victoria
Province/Country:	BC	CA-Canada
Year of construction:	2017	
No. of dwelling units:	12	
No. of occupants:	20.9	

Building:	Nanaimo Passive House - North Block	
Street:	1406 Bowen Road	
Postcode/City:	V9S 1G3	Nanaimo
Province/Country:	BC	CA-Canada
Building type:	Multi-Residential	
Climate data set:	ud---01-CA0065a-Nanaimo	
Climate zone:	3: Cool-temperate	Altitude of location: 60 m
Home owner / Client:	Nanaimo Aboriginal Centre	
Street:	20 Fifth Street	
Postcode/City:	V9R 7M1	Nanaimo
Province/Country:	BC	CA-Canada
Mechanical engineer:	Design Air Systems	
Street:	181 Prince John Way	
Postcode/City:	V9T 1K1	Nanaimo
Province/Country:	BC	CA-Canada
Certification:	Mark Ashby Architecture	
Street:	1370 Belford Avenue	
Postcode/City:	V9S 4A6	
Province/Country:	BC	

Interior temperature winter [°C]:	20.0	Interior temp. summer [°C]:	25.0
Internal heat gains (IHG) heating case [W/m²]:	2.9	IHG cooling case [W/m²]:	3.1
Specific capacity [Wh/K per m² TFA]:	60	Mechanical cooling:	

Specific building characteristics with reference to the treated floor area

Criteria	Alternative criteria	Fulfilled? ²				
			Criteria	Alternative criteria		
Space heating	Treated floor area m²	782.6				
	Heating demand kWh/(m²a)	11.0	≤	15	-	yes
	Heating load W/m²	8.6	≤	-	10	yes
Space cooling	Cooling & dehum. demand kWh/(m²a)	-	≤	-	-	-
	Cooling load W/m²	-	≤	-	-	-
	Frequency of overheating (> 25 °C) %	2	≤	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)	109	≤	-		-
Primary Energy Renewable (PER)	PER demand kWh/(m²a)	50.3	≤	60	60	yes
	Generation of renewable energy (in relation to projected building footprint area) kWh/(m²a)	0.0	≥	-	-	yes

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 Classic? **yes**

Task:	First name:	Surname:
1-Designer	Mark	Ashby
Issued on:	City:	

Signature: