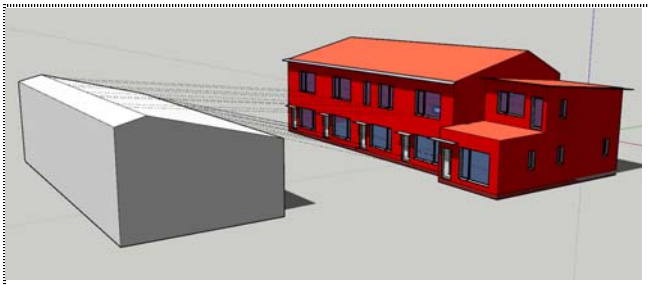
# Passive House Verification



| | | | |
|---|---|---|---|
| **Building:** | Radiance Cohousing BLDG A | | |
| Street: | 475 Avenue L South | | |
| Postcode/City: | S7M 2H4 | Saskatoon | |
| Province/Country: | Saskatchewan | CA-Canada | |
| Building type: | Multifamily Residential | | |
| Climate data set: | CA0011b-Saskatoon | | |
| Climate zone: | 2: Cold | Altitude of location: | 487 m |
| **Home owner / Client:** | Radiance Cohousing Development Company Inc. | | |
| Street: | | | |
| Postcode/City: | | Saskatoon | |
| Province/Country: | Saskatchewan | Canada | |

| | | | |
|---|---|---|---|
| **Architecture:** | BLDG Studio Inc - Crystal Bueckert | | |
| Street: | | | |
| Postcode/City: | | Saskatoon | |
| Province/Country: | Saskatchewan | Canada | |
| **Energy consultancy:** | Bright Buildings - Michael Nemeth | | |
| Street: | | | |
| Postcode/City: | | Saskatoon | |
| Province/Country: | Saskatchewan | Canada | |
| **Mechanical engineer:** | Michael Nemeth, P.Eng | | |
| Street: | | | |
| Postcode/City: | | Saskatoon | |
| Province/Country: | Saskatchewan | Canada | |
| **Certification:** | Peel Passive House Consulting - Andrew Peel | | |
| Street: | | | |
| Postcode/City: | | Blue Mountains | |
| Province/Country: | Ontario | Canada | |

| | | | | | |
|---|---|---|---|---|---|
| Year of construction: | 2017 | Interior temperature winter [°C]: | 20.0 | Interior temp. summer [°C]: | 25.0 |
| No. of dwelling units: | 5 | Internal heat gains (IHG) heating case [W/m²]: | 2.6 | IHG cooling case [W/m²]: | 4.1 |
| No. of occupants: | 11.4 | Specific capacity [Wh/K per m² TFA]: | 84 | Mechanical cooling: | |

**Specific building characteristics with reference to the treated floor area**

| | | | | Criteria | Alternative criteria | Fullfilled?[2] |
|---|---|---|---|---|---|---|
| | Treated floor area m² | 466.5 | | | | |
| **Space heating** | Heating demand kWh/(m²a) | 15 | ≤ | 15 | - | yes |
| | Heating load W/m² | 15 | ≤ | - | 10 | |
| **Space cooling** | Cooling & dehum. demand kWh/(m²a) | - | ≤ | - | - | - |
| | Cooling load W/m² | - | ≤ | - | - | |
| | Frequency of overheating (> 25 °C) % | 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) | 125 | ≤ | - | | - |
| **Primary Energy Renewable (PER)** | PER demand kWh/(m²a) | 57 | ≤ | 45 | 57 | yes |
| | Generation of renewable energy (in relation to projected building footprint area) kWh/(m²a) | 94 | ≥ | 60 | 78 | |

[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: | First name: | Surname: | Signature: |
|---|---|---|---|
| | Michael | Nemeth | |

| Issued on: | | City: |
|---|---|---|
| | | |

Project data imported from designPH 1.1.57 PHPP9 display.code: 176931570_280915_CAWCA_en09