

Date: 23rd February 2021

We have completed our Development Application stage Passive House certification assessment of the proposed dwelling to be constructed at:

34 Lumeah Avenue, Elanora Heights

I hereby attest that I have performed a preliminary assessment of the above project based upon the document list below. If constructed as documented and if an air tightness result of 0.6ACH50 is achieved, then the building can meet the Passive House standard.

Please note that certification will only be granted if the building is realised according to the design parameters given in the documents and PHPP calculation including achieving an air tightness result of 0.6ACH50 or less.

Changes to proposed insulation levels, glazing and window frame performance may compromise the energy balance / results of the project.


The following key documents were reviewed as part of the assessment:

Drawing number	Drawing name	Date	Revision
A3 11.03	PROPOSED SITE PLAN	23-02-2021	A
A3 21.01	GARAGE PLAN	23-02-2021	A
A3 21.02	GROUND FLOOR PLAN	23-02-2021	A
A3 21.03	ROOF PLAN	23-02-2021	A
A3 70.01	WINDOW SCHEUDLE	23-02-2021	A

The performance specifications are summarised here:

Building assembly overview	Average U-value [W/(m²K)]
North windows	1.358
East windows	1.301
South windows	1.315
West windows	1.439
Horizontal windows	
Exterior door	
External wall - Ambient	0.272
External wall - Ground	
Roof/Ceiling - Ambient	0.209
Floor slab / Basement ceiling	6.774

The expected final Passive House results of the completed building are outlined below:

Passive House Verification			
		Building: 35 Street: Lumeah Avenue Postcode/City: 2101 Elanora Heights Province/Country: NSW AU-Australia Building type: Home Climate data set: ud--01-AU0011a-Sydney Climate zone: 5: Warm Altitude of location: 78 m	
		Home owner / Client: Antje & Markus Street: Postcode/City: Province/Country:	
		Mechanical engineer: Street: Postcode/City: Province/Country:	
		Certification: Street: Postcode/City: Province/Country:	
Architecture: Envirotexture Street: 48 Kalang Road Postcode/City: 2101 Elanora Heights Province/Country: NSW		Energy consultancy: Envirotexture Street: 48 Kalang Road Postcode/City: 2101 Elanora Heights Province/Country: NSW	
Year of construction: 2021 No. of dwelling units: 1 No. of occupants: 3.1		Interior temperature winter [°C]: 20.0 Internal heat gains (IHG) heating case [W/m²]: 2.3 Specific capacity [Wh/K per m² TFA]: 60	
		Interior temp. summer [°C]: 25.0 IHG cooling case [W/m²]: 3.8 Mechanical cooling: x	
Specific building characteristics with reference to the treated floor area			
	Treated floor area m²	202.5	
Space heating	Heating demand kWh/(m²a)	14	≤ 15
	Heating load W/m²	13	≤ 10
Space cooling	Cooling & dehum. demand kWh/(m²a)	7	≤ 17
	Cooling load W/m²	16	≤ 10
	Frequency of overheating (> 25 °C) %	-	≤ -
	Frequency of excessively high humidity (> 12 g/kg) %	0	≤ 10
Airtightness	Pressurization test result n ₅₀ 1/h	0.6	≤ 0.6
Non-renewable Primary Energy (PE)	PE demand kWh/(m²a)	73	≤ -
Primary Energy Renewable (PER)	PER demand kWh/(m²a)	34	≤ 60
	Generation of renewable energy (in relation to projected building footprint area) kWh/(m²a)	-	≥ -
<small>² Empty field: Data missing; -: No requirement</small>			

Best regards,



Andy Marlow
Certified Passive House Designer