

NatHERS and BASIX Assessment



Sanctum Design Proposed Residential Development

To be built at 1 Tabalum Road, Balgowlah Heights NSW 2093

Issue	File Ref	Description	Author	Date
А	19-0660	NatHERS and BASIX Assessment	FM	05/09/2019
В	21-2037	NatHERS and BASIX Update	MP	07/07/2021

This report has been prepared by Efficient Living Pty Ltd on behalf of our client Sanctum Design. Efficient Living prepares all reports in accordance with the BASIX Thermal Comfort Protocol and is backed by professional indemnity insurance. This report takes into account our Client's instructions and preferred building inclusions.





7 July 2021

Legend Design 1 Tabalum Road, Balgowlah Heights

Report Contact: Manoela Place **License Holder:** Tracey Cools Email: manoela@efficientliving.com.au Accreditation Number: HERA10033

BASIX Details:

NatHERS Certificate Number: 0006220248

BASIX adjusted conditioned area: 307.1m² Area adjusted heating load: 27.2 MJ/ m²/pa BASIX adjusted un-conditioned area: 20.7m² Area adjusted cooling load: 17.5 MJ/ m²/pa

Specification

Heating and cooling loads for the development have been determined using BERS Pro Plus 4.4 thermal comfort simulation software, and assessed under the thermal simulation method of the BASIX Protocol.

The following specification was used to achieve the thermal performance values. Modelling proxies are used at times and if the buildings element details vary the thermal performance specification below shall take precedence.

If there is a change to this specification during design or construction phases, please contact Efficient Living for advice and if required an updated Certificate will be issued.

Glazing Doors/Windows

Aluminium frame double performance glazing:

U-value: 2.90 (equal to or lower than) SHGC: 0.51 (±10%)

Given values are AFRC total window system values (glass and frame)

Skylights

None

Roof

Concrete with R1.0 external insulation

External Colour

Light (SA<0.475)

Ceiling

Plasterboard ceiling with R4.5 insulation (insulation only value) to soffit of concrete where roof is over Plasterboard ceiling with R2.5 insulation (insulation only value) to soffit of concrete where balcony is over Plasterboard ceiling with an R2.5 to garage ceiling where habitable rooms above

Ceiling Penetrations

1 sealed LED light per 4m² of ceiling area

External Wall

Concrete walls with R2.5 insulation (insulation only value) plasterboard lined



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External Colour

Light (SA<0.475)

Walls within dwellings

Concrete

Floors

Concrete slab on ground with a minimum R2.5 insulation (insulation only value)

Suspended concrete with a minimum R3.0 insulation (insulation only value)

Concrete between levels, no insulation required

Floor coverings

Timber to bedrooms and tiles elsewhere

External Shading

Shading as per plans

Ventilation

All external door have weather seals, all exhaust fans and chimneys have dampers, and down lights proposed will have capped fittings

Alternative water

Tank size: 5,000L

Collecting from 200m2 roof area

Connected to outdoor tap for irrigation of landscaping

Alternative Energy

Solar Photovoltaic system minimum of 5.0 peak KW

Hot water system

5 star gas instantaneous