

# NatHERS and BASIX Assessment



# Peninsula Homes Proposed Residential Development

To be built at 41 Heathcliff Crescent, Balgowlah Heights NSW 2093

Issue	File Ref	Description	Author	Date
Α	20-0550	NatHERS Thermal Comfort and BASIX Assessment	AM	23/06/2020

This report has been prepared by Efficient Living Pty Ltd on behalf of our client Peninsula Homes. 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.

If there is a change to this specification during design or construction phases, please contact Efficient Living and quote the above file reference for advice, and to obtain an updated Certificate if required.





26 June 2020

Peninsula Homes 41 Heathcliff Crescent

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# **BASIX Details:**

NatHERS Certificate Number: 0004957726 BASIX adjusted conditioned area: 210 m<sup>2</sup> BASIX adjusted un-conditioned area: 14 m<sup>2</sup>

Area adjusted heating load: 36.3 MJ/ m<sup>2</sup>/pa Area adjusted cooling load: 17.8 MJ/ m<sup>2</sup>/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.

#### **Floors**

Concrete slab on ground, no insulation required.

Concrete floor between levels with R2.5 insulation to enclosed areas above garage. Suspended concrete with R2.5 insulation (insulation only value) to open subfloor

### **External Walls**

Cavity brick with vapour-permeable insulation and R<sub>total system value</sub> ≥ 1.8 (i.e. AIR-CELL Permicav, Foilboard® GREEN 15 or similar performing product)

Lightweight cladding on framed walls with R2.0 insulation (insulation only value)

Note: No insulation is required to external Garage walls

### **External Colour:**

Default colour modelled

#### Walls within dwellings

Single skin brick with plasterboard lining - R2.0 insulation only required to internal walls adjacent to unconditioned rooms (garage, laundry and naturally ventilated bathrooms)

Plasterboard on studs - no insulation required

# **Glazing Doors/Windows**

Glazed windows and doors:

U-value: 5.40 (equal to or lower than) SHCC: 0.58 (±10%)

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



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### **Skylights**

Double glazing with aluminium or timber frames

### **Roof and Ceilings**

Plasterboard ceiling with R3.5 insulation (insulation only value) where roof above. Metal roof with foil backed blanket ( $R_u$ 1.3 and  $R_d$ 1.3) (ie. Bradfords Anticon 60 or similar performing product)

# **External Colour**

Medium (0.475 < SA < 0.7)

### **Ceiling Penetrations**

No LED downlights within insulated zones.

### Floor coverings

Carpet to bedrooms, tiles to wet areas and timber elsewhere.

### **External Shading**

Shading as per stamped drawings

#### Ventilation

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