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LIVING

NatHERS and BASIX Assessment



Action Plans Proposed Residential Development

To be built at **26 Seaview Avenue, Curl Curl NSW 2096**

Issue	File Ref	Description	Author	Date
A	19-0098	NatHERS and BASIX Assessment	NM	28/02/2019
B	19-0846	NatHERS and BASIX Assessment update to reflect layout changes	AM	03/10/2019
C	20-1317	NatHERS and BASIX Assessment update to reflect layout changes	FM	11/01/2021

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



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BASIX Details:

NatHERS Certificate Number: 0005578497-01

BASIX adjusted conditioned area: 299 m²

Area adjusted heating load: 41.8 MJ/ m²/pa

BASIX adjusted un-conditioned area: 44 m²

Area adjusted cooling load: 24.8 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.

Floors

Concrete slab on ground no insulation required

Suspended concrete with a minimum R2.0 insulation (insulation only value)

Concrete between basement and ground, no insulation required

Timber between ground and first floor, no insulation required

Suspended timber floor with R2.5 insulation

External Walls

Brick veneer with R1.5 insulation (insulation only value)

Lightweight frame with a minimum R 2.5 insulation (insulation only value)

Blueboard with minimum Total System R value Rt = 2.78

Existing Cavity Brick no insulation

Cavity brick with AIR-CELL Permicav insulation Minimum Total system R-Value of Rt 1.79

Note: No insulation is required to Garage walls

External Colour

Default colour modelled

Walls within dwellings

Masonry walls as per plans no insulation required

Plasterboard on stud as per plan with R2.0 insulation to internal walls adjacent to garage



Glazing Doors/Windows

Glazed windows and doors:

Group A – awning + bifold + casement windows + hinged glazed doors

U-value: 4.80 (equal to or lower than) SHGC: 0.51 (±10%)

Group B – sliding doors/windows + fixed glazing + louvre windows

U-value: 4.80 (equal to or lower than) SHGC: 0.59 (±10%)

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

Note: Openability modelled as per BASIX Thermal Protocol – 4.14.2 and NatHERS Technical Note 1.2 – 10.11 with regards to restricted openings

Skylights

U-value: 4.2 and SHGC: 0.72

Roof

Metal roof with foil backed blanket (R_u 1.3 and R_d 1.3)

External Colour

Light ($SA < 0.75$)

Ceilings

Lined ceiling, with an R. 3.0 insulation (insulation value only) where metal roof is above.

Lined ceiling, with an R. 3.0 insulation (insulation value only) where balcony/deck above.

Lined ceiling with R2.0 insulation to garage where habitable rooms above.

Ceiling Penetrations

Loss of ceiling insulation has been accounted for in accordance with BASIX Thermal Protocol 4.13.1 and NatHERS Technical Note 1.2

Assumed sealed LED downlights, one every 5m²

Floor coverings

Tiles to kitchen/living areas & wet areas, and timber elsewhere as shown on plans

External Shading

Shading as per stamped documentation

Ventilation

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