

Energy Efficiency Assessment Report

Residential Building

Report researched and documented by	Nationwide house energy rating scheme
Date	29/03/2021
Building and construction project	New home Melbourne
Project overview	Domestic house, being a 4 bedroom house in Melbourne. Single story house built with a brick veneer facade system..
Building classification	Class 1a
Project site address	Not noted
NCC Climate Zone	Not Noted
Extreme weather conditions likely to impacting the building	Not Noted
State/territory where this project is being undertaken	Victoria

Building use	Residential home
Environmental conditions	Not Noted
Building positioning	South Western orientation
NCC Energy efficiency performance requirements to be met	6 star rating required. Achieved a 6.1 star rating.

Energy efficiency expectations of the building	-Proposed concrete waffle slab -R2.0 glass fibre batt insulation in all external brick veneer walls plus sis (ground floor) -R2.0 glass fibre batt insulation in all external clad walls plus sis (ground floor) -R2.0 glass fibre batt insulation in all internal garage stud walls (ground floor) -R4.0 glass fibre batt insulation to be provided in all ceiling areas -Aluminium single and double glazed windows/sliding door units to be provided as per report *The building materials listed in the report is the minimum requirement to achieve the necessary star rating. All State, Territory & Federal building standards and regulations must be adhered to. *All insulation is to be supplied and installed as per the relevant Australian Standards. *(NCC 2016: V2, BCA- Victoria) In the case of any new Class 1 building, it must either be supplied with a rainwater tank connected to all sanitary flushing systems or a solar hot water heater system be provided. *(NCC 2016: V2, BCA) This Thermal Performance Assessment meets the 6 Star Rating required as laid out in the NCC 2016, BCA V2, Class 1 and Class 10 Buildings. *Glazing and doors sizes as nominated must not be amended or increased as it may result in an alternate result to the report provided. Where window or door sizes are to be amended an amended report is to be requested. *Total System "U-Value"- The glass windows and/or glass doors supplied must equal and/or can be of lesser value than the "U-Values" nominated in this report. Note: only a +/-5% SHGC Tolerance is allowed with this rating.
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Health and Safety Risks associated with occupant indoor activities requiring mitigation	Explanatory Notes About this report A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels. Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.
Health and Safety Risks associated with Building construction	Not Noted
Greenhouse and Energy Minimum Standard (GEMS) Act Compliance	Certificate Check Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating. Genuine certificate Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?
Minimum Energy Performance Standards (MEPS) Compliance	In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au. State and territory variations and additions to the NCC may also apply.

Reference to local and international codes for best practice	Verification To verify this certificate, scan the QR code or visit https://www.fr5.com.au/QRCodeLanding?PublicId=4AJSPXRFR0 When using either link, ensure you are visiting www.FR5.com.au. 
Applicable standard to be adhered to (Specifically when referenced by NCC)	About the rating NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Building science principles applicable to the building	A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels. Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.
Supporting websites, documents	AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements. Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.