

# HOUSE ENERGY RATING PERFORMANCE REPORT

**Project** : Geoff Gibson Hume Street Display Home BERS Assessment  
**Address** : Lot 22 Hume Street, Middle Ridge  
**Date** : 30 June, 2015

## INTRODUCTION

An assessment of the thermal performance of the proposed display home at Lot 22 Hume Street, Middle Ridge has been undertaken using the BERS Pro software.

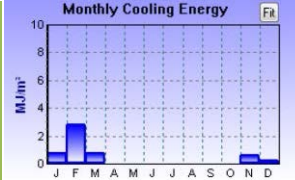
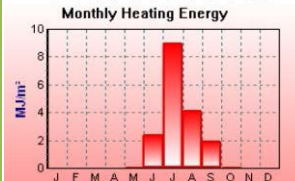
## SUMMARY OF BERS PRO ASSESSMENT

The following table presents a summary of results as determined using BERS Pro. A graphical profile of heating and cooling loads throughout the year is also provided. Note that the heating and cooling energy required is that energy which is assumed to be used to move the temperature inside the house, back to within standard comfort bands, whether or not any active heating or cooling system is actually to be installed in the house.

Run	Conditions	C	H	T	S
1	As per design documentation – Drawings, and returned RFI	4.9	17.0	21.9	9.0

**C = Cooling energy required (MJ/m<sup>2</sup>)**  
**H = Heating energy required (MJ/m<sup>2</sup>)**  
**T = Total energy required (MJ/m<sup>2</sup>)**  
**S = Star rating**

Note: Heating and cooling loads are adjusted to take into consideration house floor area (this is the rating upon which compliance with the BCA made)

BERS Pro is able to give a breakdown of the performance of individual spaces within the house, providing greater insight into the house performance. Following is the performance of major conditioned spaces:

Conditioned Space Label	C	H	T	S
Living/Kitchen	9.3	19.5	28.9	8.5
Theatre	3.1	15.3	18.4	9.0
Bedroom 1	0.1	0.8	0.9	10.0
Bedroom 2	1.8	3.5	5.2	10.0
Bedroom 3	3.0	7.6	10.6	9.5
Bedroom 4	1.5	14.6	16.1	9.0

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**H = Heating energy required (MJ/m<sup>2</sup>)**  
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Note: The variance between adjoining rooms in the results shown above is accounted for by their time of use, that is whether they are daytime occupied spaces or nighttime occupied spaces.

The house is well insulated and oriented such that the main living spaces enjoy a north easterly orientation. Heat gain from the west is effectively avoided for these spaces and the outdoor living area provides summer shading. Generally, all rooms in the house require more heating in winter than cooling during the summer months. The room by room breakdown shows that the living / kitchen area requires the highest input of energy to maintain thermal comfort. Overall, the house achieves an excellent level of thermal performance.