

NATHERS GUIDELINES FOR VICTORIA, INCLUDING THE 5 STAR COMPLIANCE PRO FORMA

NatHERS use in Victoria

Both FirstRate and NatHERS are recognised software tools in Victoria. Both will provide an energy rating for houses and apartments.

It should be noted that there are some situations in which only NatHERS can be used. Where NatHERS is used for regulatory purposes, the annual energy consumption which is predicted by NatHERS for the dwelling will need to be converted in accordance with the guidelines below.

Situations in which FirstRate must not be used and NatHERS must be used instead are:

1. Where the total area of glazing is greater than 60% of the NCFA (Net Conditioned Floor Area)
2. Where the glazing of any one orientation is greater than 35% of NCFA

Who can provide NatHERS ratings?

As an interim measure NatHERS ratings can be provided by either:

1. Accredited FirstRate energy raters in Victoria who have attended a NatHERS training course in either Victoria or NSW. Contact the Sustainable Energy Authority for a list of NatHERS assessors.
2. NatHERS assessors accredited under the energy rating accreditation program administered in NSW by the Association of Building Sustainability Assessors (ABSA). A list of Accredited Assessors can be obtained from <http://www.hmb.net.au/ABSA.html>
3. Energy raters (not accredited as FirstRate users) who reside in Victoria and who have attended both a NatHERS training course and passed the accreditation exam in NSW.

The above arrangements will be amended later in 2004 to provide formal accreditation for NatHERS assessors operating in Victoria. Demonstration of competency in energy rating using NatHERS will be required. Accreditation in NSW will be considered to be sufficient demonstration of competency.

Applying NatHERS in Victoria

The guidelines for the conduct of NatHERS assessments in NSW differ in a few situations from those given for the conduct of a FirstRate assessment. NatHERS assessments performed on homes to be built in Victoria must be conducted in accordance with the following guidelines:

1. Walls shared to garages should not be classified as a 'Neighbour'. Instead they should be classified as external walls. In addition, add R0.5 insulation to any insulation in the wall.
2. Floors above garages/basement car parks should not be classified as a 'Neighbour'. Instead classify the sub-floor ventilation below as 'Open' if there are walls to the car park with few ventilation points and a solid garage door or 'Elevated' if the car park has few walls.
3. Bathrooms, laundries and WCs are normally classified as unconditioned spaces in both NatHERS and FirstRate. Where these spaces can only be ventilated mechanically because they have no windows, fixed open skylights or vents to the outside these

spaces are assumed to be part of the conditioned zones. The exhaust of air to the outside from these spaces will draw in heated/cooled air from the surrounding area and these spaces are therefore assumed to be effectively conditioned spaces. This will often apply in apartment buildings.

4. It should be noted that currently the star rating generated in NatHERS for Victorian climates cannot be equated to the star rating generated by FirstRate. In addition, NatHERS does not include the Area Adjustment which is provided in FirstRate to equalise the points according to the size of the home.

To equate NatHERS reports to FirstRate the annual MJ/m² energy consumption predicted by NatHERS must be modified according to the charts and tables below.

Rating with NatHERS for regulatory purposes

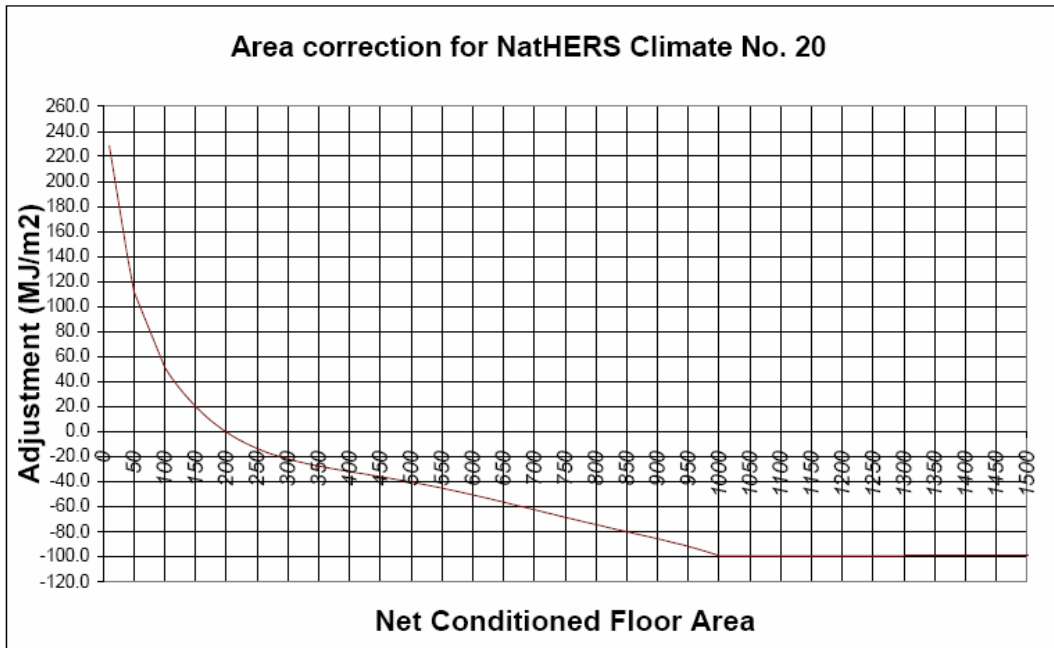
Step 1 Apply the Area Correction

NatHERS does not include the area correction provided by FirstRate. The NatHERS predicted energy use (MJ/m²) must be adjusted (where required) according to the charts below.

- Firstly, check the climate zone for your rating.
- Next, locate the relevant chart below for the climate zone
- Next, look up the area of Net Conditioned Floor (NCFA) for the rated house as shown on the NatHERS report.
- Finally, look up the chart to determine by how much you need to adjust the predicted amount of MJ/m² predicted by NatHERS for your design. You will need to subtract the amount shown from the MJ/m² predicted by NatHERS. i.e. for cases where the NCFA is less than 200m², the adjustment makes the MJ/m² smaller, where the NCFA is greater than 200m² the adjustment makes the MJ/m² larger.
- Once you adjust the predicted MJ/m² go to Step 2 below.

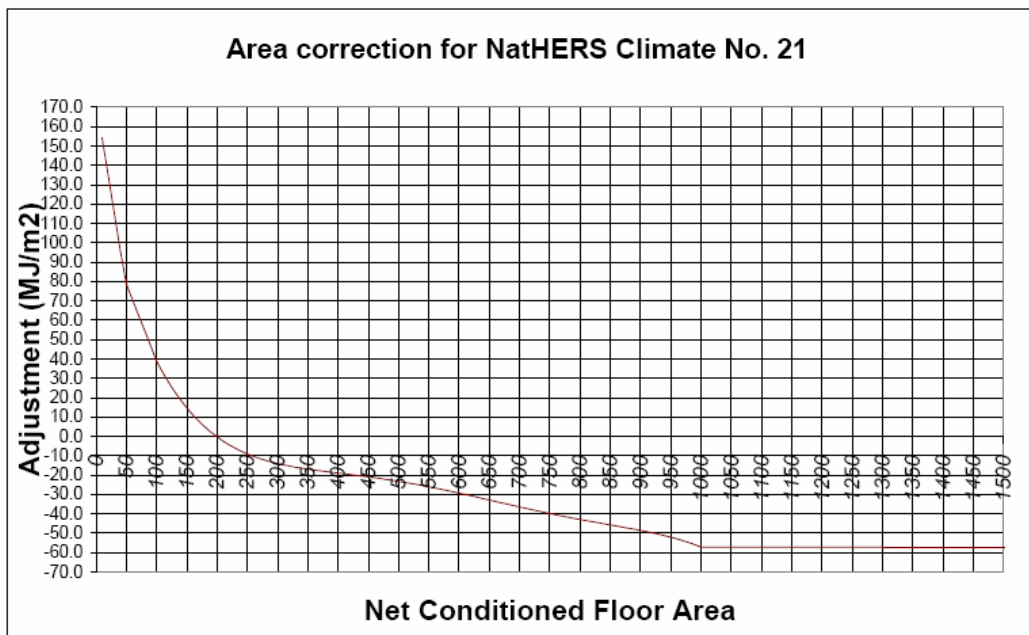
Climate 20

Includes central and northern Victorian postcodes



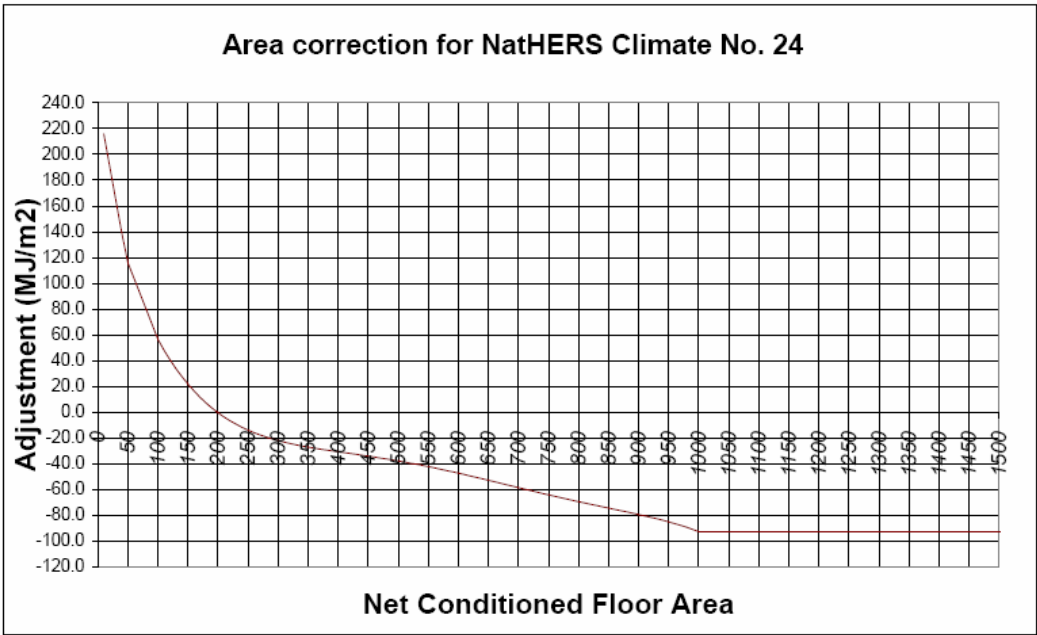
Climate 21

Includes Melbourne metropolitan area and coastal Victorian postcodes

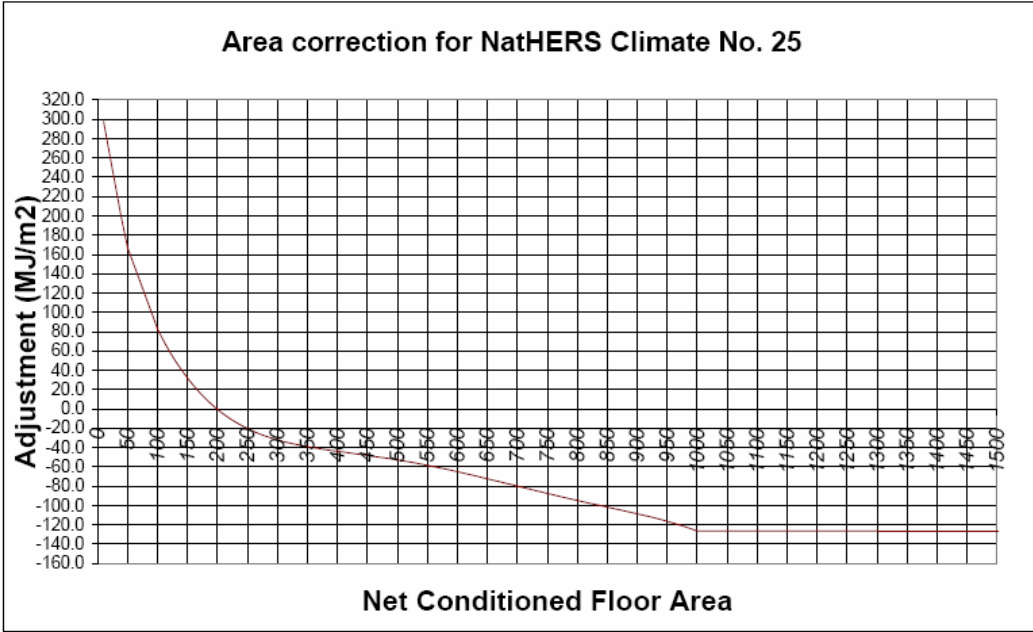


Climate 24

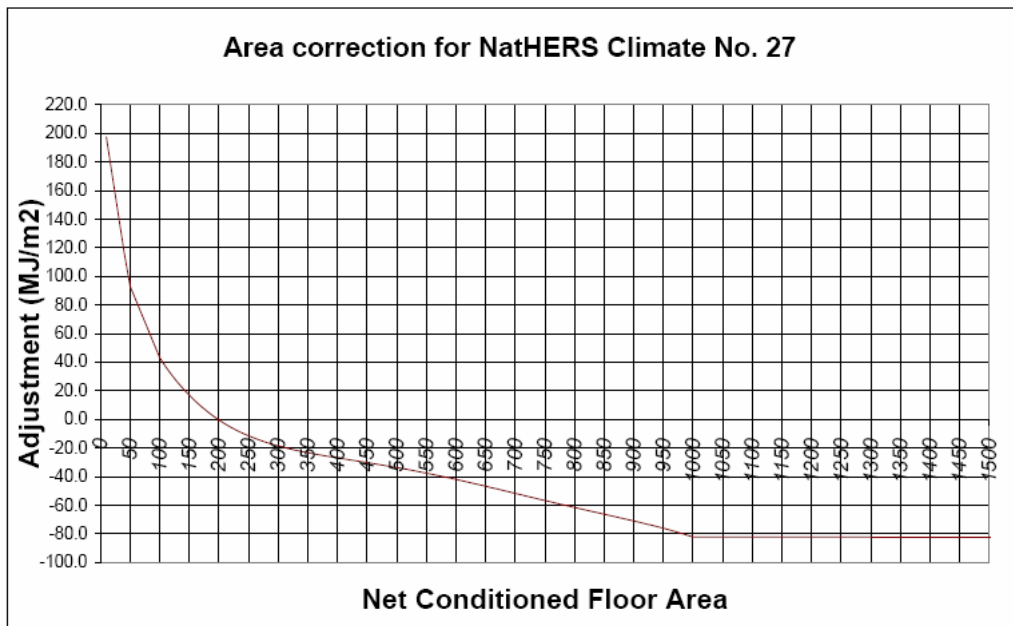
Includes Ballarat, Ararat, Mount Dandenong



Climate 25
Alpine regions



Climate 27
Mildura



Step 2 Convert to Star bands

NatHERS does not have the same star bands provided in FirstRate. As a consequence, the annual energy consumption (MJ/m²) predicted in NatHERS – as adjusted for the size of the house – must next be modified according to the table below.

- Determine the climate zone for the rating
- For the selected climate zone look up the adjusted MJ/m² for the dwelling on the chart below.
- Determine which of the star bands the adjusted MJ/m² falls into
- The star band shown is the Star rating for the dwelling

Table 1 Determining the Victorian star rating for NatHERS ratings

Climate zone	FirstRate star bands									
	½	1	1 ½	2	2 ½	3	3 ½	4	4 ½	5
Climate 20	787 – 665	664 – 560	559 – 470	469 – 395	394 – 335	334 – 286	285 – 245	244 – 215	214 – 193	192 or less
Climate 21	478 – 429	428 – 379	378 – 329	328 – 284	283 – 240	239 – 216	215 – 192	191 – 170	169 – 148	147 or less
Climate 24	824 – 687	686 – 572	571 – 479	478 – 410	409 – 353	352 – 307	306 – 272	271 – 245	244 – 222	221 or less
Climate 27	674 – 558	557 – 463	462 – 384	383 – 316	315 – 264	263 – 221	220 – 190	189 – 163	162 – 138	137 or less

NatHERS Compliance Report

Compliance Report

The following table lists those features of house design and construction which have been identified by the software as critical to the achievement of the rating. If there has been any change to these features proposed or during construction the house should be re-rated to ensure that the required star rating has been maintained.

This page must be checked and signed by the builder and owner and presented to the Building Surveyor as evidence that the house has been constructed in accordance with the star rating prior to the issuing of an Occupancy Permit. If the house has not been constructed to the standards listed in this table, further ratings must be provided to show that the required rating has been achieved.

Item	Details	Variation	Comments
Floors			
Main Ext. floor construction		YES NO	
External Floor Area	m2	YES NO	
Shared Floor Area	%	YES NO	
% Ext floors carpeted	%	YES NO	
Avg. floor insulation	R	YES NO	
Walls			
Main Ext. wall construction		YES NO	
External Wall Area	m2	YES NO	
Shared Wall Area	%	YES NO	
Avg. wall insulation	R	YES NO	
Ceilings			
Main Ext. Ceiling construction		YES NO	
External Ceiling Area	m2	YES NO	
Shared Ceiling Area	%	YES NO	
Avg. Ceiling insulation	R	YES NO	
Terrain			
Is there More than One Storey ?	Yes / No	YES NO	
Is the Entry open to the Living Area ?	Yes / No	YES NO	
Area of Heavyweight Mass (int wall)	m ²	YES NO	
Area of Lightweight Mass (int wall)	m ²	YES NO	

Air Leakage

Items	Sealed?					
Chimneys	YES NO	YES NO				
Fixed Vents	YES NO	YES NO				
Exhaust Fan	YES NO	YES NO				
Weatherstrips	YES NO	YES NO				
Vented Skylight	YES NO	YES NO				
Windows						
All Windows Direction	Area (m ²)	Eaves	Blinds	Obst	Variation?	Comments
N		Yes / No	Yes / No	Yes / No	Yes / No	
NNE		Yes / No	Yes / No	Yes / No	Yes / No	
NE		Yes / No	Yes / No	Yes / No	Yes / No	
ENE		Yes / No	Yes / No	Yes / No	Yes / No	
E		Yes / No	Yes / No	Yes / No	Yes / No	
ESE		Yes / No	Yes / No	Yes / No	Yes / No	
SE		Yes / No	Yes / No	Yes / No	Yes / No	
SSE		Yes / No	Yes / No	Yes / No	Yes / No	
S		Yes / No	Yes / No	Yes / No	Yes / No	
SSW		Yes / No	Yes / No	Yes / No	Yes / No	
SW		Yes / No	Yes / No	Yes / No	Yes / No	
WSW		Yes / No	Yes / No	Yes / No	Yes / No	
W		Yes / No	Yes / No	Yes / No	Yes / No	
WNW		Yes / No	Yes / No	Yes / No	Yes / No	
NW		Yes / No	Yes / No	Yes / No	Yes / No	
NNW		Yes / No	Yes / No	Yes / No	Yes / No	