



NatHERS heating and cooling load limits

ABCB Standard

2019.1



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1 Scope and general

1.1 General

The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia whilst allowing for variations in climate and geological or geographic conditions.

The NCC energy efficiency provisions require dwellings to appropriately manage solar radiation to separately minimise heating and cooling loads.

Section 2 of this Standard contains separate heating and cooling load limits that apply to the design and construction of dwellings using the NCC's *NatHERS* compliance pathway for energy efficiency.

1.2 Scope

This Standard provides details of the heating and cooling load limits that apply to the *NatHERS* compliance pathway in clause J0.2 of Volume One and clause 3.12.0.1 of Volume Two of the NCC. It must be emphasised that this Standard is not a standalone requirement. These load limits are an additional requirement to the existing star ratings for Class 1 buildings, Class 2 sole-occupancy units (SOUs) and Class 4 parts of buildings.

Separate heating and cooling load limits are not required to be achieved in all 69 *NatHERS* climate zones. This is because some climates are dominated by hot or cold weather, such as the climate zones in the Northern Territory (NT), Tasmania (Tas) and some climates zones in Queensland (Qld) and Western Australia (WA).

New South Wales (NSW) already has separate heating and cooling load limits (or "caps") covered in its Building Sustainability Index (BASIX) Thermal Comfort requirements.

Hence, heating and cooling load limits do not apply in NSW, NT, Tas and parts of Qld and WA.

1.3 Application

When using the *NatHERS* compliance pathway for energy efficiency, the NCC requires:

- a Class 1 dwelling to achieve a NatHERS 6-star rating, but allows a 5.5 or
 5-star rating if a dwelling has an outdoor living area and/or a ceiling fan in NCC climate zones 1 and 2.
- Class 2 SOUs and Class 4 parts of buildings to achieve 6 stars on average and a minimum star rating of 5.

Accordingly, heating and cooling load limits have been developed to correspond to each of these target star ratings.

1.4 Normative references

The following documents are referred to in this Standard:

- (a) NCC Volume One; and
- (b) NCC Volume Two.

1.5 Units

This Standard uses MJ/m².annum for heating/cooling load limits.

1.6 Definitions

Defined terms used within the text of this Standard are printed in *italics*. For the purposes of this Standard the following definitions apply:

NatHERS: software accredited under the Nationwide House Energy Rating Scheme (*NatHERS*), which rates (out of ten stars) the energy efficiency of dwellings based on their design.

Heating load/cooling load: the amount of heat energy calculated by *NatHERS* accredited software that would need to be added to/removed from a space to maintain the temperature in an acceptable range.

NatHERS climate zone: one of the 69 climate zones under *NatHERS*. (Information about *NatHERS* climate zones can be accessed at nathers.gov.au.)

Living area: a conditioned area of a dwelling, including a living, kitchen, and/or kitchen/living zone, as defined by *NatHERS*.

2 NatHERS heating and cooling load limits

2.1 Limitations

This Standard only applies to the *NatHERS* compliance pathway for energy efficiency, specified in clause J0.2 of Volume One and subclause 3.12.0(a)(i) of Volume Two of the NCC. It applies to Class 1 buildings, Class 2 SOUs and Class 4 parts of buildings.

NT, Tas, NSW and parts of Qld and WA are excluded from the heating and cooling load limits. The heating and cooling load limits for the affected *NatHERS climate zones* are shown as 'Not Applicable' (N/A) in the following tables.

2.2 Compliance requirements

The *NatHERS* compliance pathway requires a building to achieve a minimum star rating and satisfy the separate heating and cooling load limits that correspond to that star rating. The applicable load limits are specified in clauses 2.3 and 2.4 below.

2.3 Application

- A Class 1 building must not exceed the heating and cooling load limits corresponding to—
 - (a) the targeted star rating in subclause 3.12.0.1(a) of Volume Two of the NCC; and
 - (b) the floor type of the lowest *living area*;
 - where-
 - (c) the heating and cooling load limits in Tables 1, 3 and 5 apply if the floor is a Concrete Slab-on-Ground (CSOG); and
 - (d) the heating and cooling load limits in Tables 2, 4 and 6 apply if the floor is-
 - (i) a Suspended Floor (SF) of timber or concrete; or
 - (ii) a mixture of CSOG and SF, or

Explanatory information:

The applicable load limits for Class 1 buildings are determined by the floor type of the lowest living area, e.g. for a two-storey house this would typically be the ground floor, but could be the first floor if the ground floor is a garage.

2. A Class 2 SOU or Class 4 part of a building, regardless of floor type, must not exceed the heating and cooling load limits in Tables 7 and 8 corresponding to the star ratings in subclause J0.2(a) of Volume One of the NCC.

Explanatory information:

For Class 2 SOUs, the average of all SOUs' heating and cooling loads should not exceed the heating and cooling load limits for 6 stars in Table 7. The worst performing SOU should not exceed the heating and cooling load limits for 5 stars in Table 8.

2.4 NatHERS heating and cooling load limits tables

Table 1 Class 1 CSOG – Heating and cooling load limits applying to NatHERS 6 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	WA	8	50
5	N/A	N/A	N/A
6	Qld	57	91
7	Qld	13	85
8	Qld, SA	71	57
9	Qld	33	52
10	Qld	24	31
11	N/A	N/A	N/A
12	WA	35	44
13	WA	57	39
14	Qld	121	26
15	N/A	N/A	N/A
16	SA	67	52
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	Qld	52	66
20	Vic	114	47
21	Vic	96	45
22	Vic	123	27
23	N/A	N/A	N/A
24	ACT, Vic	154	38
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	Vic, SA	82	57
28	N/A	N/A	N/A
29	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
30	N/A	N/A	N/A
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	WA	16	122
41	WA	28	89
42	WA	20	63
43	SA	35	91
44	WA	52	32
45	SA	66	57
46	N/A	N/A	N/A
47	WA	87	40
48	N/A	N/A	N/A
49	WA	85	47
50	Qld	57	44
51	WA	57	40
52	WA	32	19
53	SA	62	43
54	WA	53	39
55	WA	54	25
56	N/A	N/A	N/A
57	WA	96	40
58	WA	79	13
59	SA	226	14
60	Vic	126	31

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NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
61	Vic, SA	139	20
62	Vic	115	24
63	Vic	140	22
64	Vic	119	21
65	N/A	N/A	N/A
66	Vic	189	26
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 2 Class 1 SF – Heating and cooling load limits applying to NatHERS 6 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	WA	15	49
5	N/A	N/A	N/A
6	Qld	64	89
7	Qld	18	86
8	Qld, SA	65	63
9	Qld	34	47
10	Qld	28	31
11	N/A	N/A	N/A
12	WA	37	41
13	WA	38	46
14	Qld	113	40
15	N/A	N/A	N/A
16	SA	55	59
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	Qld	55	64
20	Vic	93	47
21	Vic	88	47
22	Vic	117	39
23	N/A	N/A	N/A
24	ACT, Vic	143	47
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	Vic, SA	78	68
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	WA	14	124
41	WA	42	86
42	WA	31	61
43	SA	48	88
44	WA	52	42
45	SA	62	61
46	N/A	N/A	N/A
47	WA	68	50
48	N/A	N/A	N/A
49	WA	72	63
50	Qld	58	44
51	WA	51	47
52	WA	28	24
53	SA	55	51
54	WA	42	47
55	WA	49	33
56	N/A	N/A	N/A
57	WA	85	56
58	WA	77	18
59	SA	220	24
60	Vic	121	43
61	Vic, SA	132	31

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NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
62	Vic	109	34
63	Vic	138	36
64	Vic	113	31
65	N/A	N/A	N/A
66	Vic	181	48
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 3 Class 1 CSOG – Heating and cooling load limits applying to NatHERS 5.5 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A
5	N/A	N/A	N/A
6	N/A	N/A	N/A
7	Qld	15	97
8	N/A	N/A	N/A
9	Qld	43	61
10	Qld	31	36
11	N/A	N/A	N/A
12	N/A	N/A	N/A
13	N/A	N/A	N/A
14	N/A	N/A	N/A
15	N/A	N/A	N/A
16	N/A	N/A	N/A
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	N/A	N/A	N/A
20	N/A	N/A	N/A
21	N/A	N/A	N/A
22	N/A	N/A	N/A
23	N/A	N/A	N/A
24	N/A	N/A	N/A
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	N/A	N/A	N/A
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A
31	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	N/A	N/A	N/A
41	N/A	N/A	N/A
42	N/A	N/A	N/A
43	N/A	N/A	N/A
44	N/A	N/A	N/A
45	N/A	N/A	N/A
46	N/A	N/A	N/A
47	N/A	N/A	N/A
48	N/A	N/A	N/A
49	N/A	N/A	N/A
50	N/A	N/A	N/A
51	N/A	N/A	N/A
52	N/A	N/A	N/A
53	N/A	N/A	N/A
54	N/A	N/A	N/A
55	N/A	N/A	N/A
56	N/A	N/A	N/A
57	N/A	N/A	N/A
58	N/A	N/A	N/A
59	N/A	N/A	N/A
60	N/A	N/A	N/A
61	N/A	N/A	N/A
62	N/A	N/A	N/A
63	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
64	N/A	N/A	N/A
65	N/A	N/A	N/A
66	N/A	N/A	N/A
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 4 Class 1 SF – Heating and cooling load limits applying to NatHERS 5.5 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A
5	N/A	N/A	N/A
6	N/A	N/A	N/A
7	Qld	25	93
8	N/A	N/A	N/A
9	Qld	42	52
10	Qld	36	32
11	N/A	N/A	N/A
12	N/A	N/A	N/A
13	N/A	N/A	N/A
14	N/A	N/A	N/A
15	N/A	N/A	N/A
16	N/A	N/A	N/A
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	N/A	N/A	N/A
20	N/A	N/A	N/A
21	N/A	N/A	N/A
22	N/A	N/A	N/A
23	N/A	N/A	N/A
24	N/A	N/A	N/A
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	N/A	N/A	N/A
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	N/A	N/A	N/A
41	N/A	N/A	N/A
42	N/A	N/A	N/A
43	N/A	N/A	N/A
44	N/A	N/A	N/A
45	N/A	N/A	N/A
46	N/A	N/A	N/A
47	N/A	N/A	N/A
48	N/A	N/A	N/A
49	N/A	N/A	N/A
50	N/A	N/A	N/A
51	N/A	N/A	N/A
52	N/A	N/A	N/A
53	N/A	N/A	N/A
54	N/A	N/A	N/A
55	N/A	N/A	N/A
56	N/A	N/A	N/A
57	N/A	N/A	N/A
58	N/A	N/A	N/A
59	N/A	N/A	N/A
60	N/A	N/A	N/A
61	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
62	N/A	N/A	N/A
63	N/A	N/A	N/A
64	N/A	N/A	N/A
65	N/A	N/A	N/A
66	N/A	N/A	N/A
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 5 Class 1 CSOG – Heating and cooling load limits applying to NatHERS 5 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A
5	N/A	N/A	N/A
6	N/A	N/A	N/A
7	Qld	23	106
8	N/A	N/A	N/A
9	Qld	45	67
10	Qld	38	42
11	N/A	N/A	N/A
12	N/A	N/A	N/A
13	N/A	N/A	N/A
14	N/A	N/A	N/A
15	N/A	N/A	N/A
16	N/A	N/A	N/A
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	N/A	N/A	N/A
20	N/A	N/A	N/A
21	N/A	N/A	N/A
22	N/A	N/A	N/A
23	N/A	N/A	N/A
24	N/A	N/A	N/A
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	N/A	N/A	N/A
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	N/A	N/A	N/A
41	N/A	N/A	N/A
42	N/A	N/A	N/A
43	N/A	N/A	N/A
44	N/A	N/A	N/A
45	N/A	N/A	N/A
46	N/A	N/A	N/A
47	N/A	N/A	N/A
48	N/A	N/A	N/A
49	N/A	N/A	N/A
50	N/A	N/A	N/A
51	N/A	N/A	N/A
52	N/A	N/A	N/A
53	N/A	N/A	N/A
54	N/A	N/A	N/A
55	N/A	N/A	N/A
56	N/A	N/A	N/A
57	N/A	N/A	N/A
58	N/A	N/A	N/A
59	N/A	N/A	N/A
60	N/A	N/A	N/A
61	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
62	N/A	N/A	N/A
63	N/A	N/A	N/A
64	N/A	N/A	N/A
65	N/A	N/A	N/A
66	N/A	N/A	N/A
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 6 Class 1 SF – Heating and cooling load limits applying to NatHERS 5 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A
5	N/A	N/A	N/A
6	N/A	N/A	N/A
7	Qld	24	106
8	N/A	N/A	N/A
9	Qld	47	62
10	Qld	40	37
11	N/A	N/A	N/A
12	N/A	N/A	N/A
13	N/A	N/A	N/A
14	N/A	N/A	N/A
15	N/A	N/A	N/A
16	N/A	N/A	N/A
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	N/A	N/A	N/A
20	N/A	N/A	N/A
21	N/A	N/A	N/A
22	N/A	N/A	N/A
23	N/A	N/A	N/A
24	N/A	N/A	N/A
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	N/A	N/A	N/A
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	N/A	N/A	N/A
41	N/A	N/A	N/A
42	N/A	N/A	N/A
43	N/A	N/A	N/A
44	N/A	N/A	N/A
45	N/A	N/A	N/A
46	N/A	N/A	N/A
47	N/A	N/A	N/A
48	N/A	N/A	N/A
49	N/A	N/A	N/A
50	N/A	N/A	N/A
51	N/A	N/A	N/A
52	N/A	N/A	N/A
53	N/A	N/A	N/A
54	N/A	N/A	N/A
55	N/A	N/A	N/A
56	N/A	N/A	N/A
57	N/A	N/A	N/A
58	N/A	N/A	N/A
59	N/A	N/A	N/A
60	N/A	N/A	N/A
61	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
62	N/A	N/A	N/A
63	N/A	N/A	N/A
64	N/A	N/A	N/A
65	N/A	N/A	N/A
66	N/A	N/A	N/A
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 7 Class 2 SOU and Class 4 parts – Heating and cooling load limits applying to NatHERS 6 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m²·annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	WA	13	50
5	N/A	N/A	N/A
6	Qld	75	83
7	Qld	17	87
8	Qld, SA	67	61
9	Qld	48	44
10	Qld	25	32
11	N/A	N/A	N/A
12	WA	41	37
13	WA	52	41
14	Qld	119	12
15	N/A	N/A	N/A
16	SA	58	53
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	Qld	61	59
20	Vic	109	28
21	Vic	88	36
22	Vic	118	23
23	N/A	N/A	N/A
24	ACT, Vic	144	31
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	Vic, SA	81	65
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m ^{2.} annum)
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	N/A	N/A	N/A
36	N/A	N/A	N/A
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	N/A	N/A	N/A
40	N/A	N/A	N/A
41	WA	45	87
42	WA	32	62
43	SA	48	91
44	WA	50	45
45	SA	64	59
46	N/A	N/A	N/A
47	WA	75	39
48	N/A	N/A	N/A
49	WA	79	42
50	Qld	57	47
51	WA	54	41
52	WA	30	20
53	SA	58	46
54	WA	48	40
55	WA	51	21
56	N/A	N/A	N/A
57	WA	92	27
58	WA	76	10
59	N/A	N/A	N/A
60	Vic	113	47
61	Vic, SA	133	15

ABCB Standard: NatHERS heating and cooling loads

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m²·annum)
62	Vic	109	26
63	Vic	138	18
64	Vic	113	20
65	N/A	N/A	N/A
66	Vic	178	28
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

Table 8 Class 2 SOU and Class 4 parts – Heating and cooling load limits applying to NatHERS 5 stars

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	WA	39	64
5	N/A	N/A	N/A
6	Qld	108	124
7	Qld	59	108
8	Qld, SA	91	92
9	Qld	62	71
10	Qld	40	48
11	N/A	N/A	N/A
12	WA	54	60
13	WA	70	57
14	Qld	155	29
15	N/A	N/A	N/A
16	SA	96	93
17	N/A	N/A	N/A
18	N/A	N/A	N/A
19	Qld	84	95
20	Vic	149	80
21	Vic	120	62
22	Vic	157	40
23	N/A	N/A	N/A
24	ACT, Vic	194	47
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	Vic, SA	113	97
28	N/A	N/A	N/A
29	N/A	N/A	N/A
30	N/A	N/A	N/A

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
31	N/A	N/A	N/A
32	N/A	N/A	N/A
33	N/A	N/A	N/A
34	N/A	N/A	N/A
35	Qld	21	112
36	Qld	31	73
37	N/A	N/A	N/A
38	N/A	N/A	N/A
39	Qld	52	205
40	WA	84	161
41	WA	89	110
42	WA	65	79
43	SA	95	118
44	WA	70	68
45	SA	85	94
46	N/A	N/A	N/A
47	WA	101	60
48	N/A	N/A	N/A
49	WA	107	68
50	Qld	76	71
51	WA	74	62
52	WA	41	30
53	SA	80	67
54	WA	64	59
55	WA	69	35
56	N/A	N/A	N/A
57	WA	123	49
58	WA	99	23
59	N/A	N/A	N/A
60	Vic	160	48
61	Vic, SA	172	35

ABCB Standard: NatHERS heating and cooling loads

NatHERS climate zone	Applicable State and/or Territory	Heating load limit (MJ/m².annum)	Cooling load limit (MJ/m².annum)
62	Vic	147	37
63	Vic	178	40
64	Vic	150	39
65	N/A	N/A	N/A
66	Vic	233	50
67	N/A	N/A	N/A
68	N/A	N/A	N/A
69	N/A	N/A	N/A

3 References

The principles and methodology for developing the heating and cooling load limits is included in the *NatHERS* heating and cooling load limits report:

Australian Building Codes Board, Report, *NCC 2019 Energy efficiency residential buildings NatHERS heating and cooling load limits*, <u>abcb.gov.au</u>, 2018.