TenancyServices

Heating Report

Report Details

This report was generated by
Joel Hansen

Address of rental property
1/15 Mountain View Place, Leeston

Name of landlord
Ray White
Lincoln

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11:19am

How to provide this heating requirement

You need 5kW of heating capacity to heat your living room

This is the minimum required heating capacity you need to meet the healthy homes standards, based on the information you supplied. It takes into account your local climate and the design and construction of your home. The tool makes some assumptions to keep things simple.

Your heating needs to provide this heating capacity with an outdoor temperature of -4°C

Heat pump installers need to know the outdoor temperature to work to. This is because the heating capacity of a heat pump reduces with colder outdoor temperatures. If you live somewhere cold, you may need a particular model of heat pump to give enough heating capacity.

Choose the right type and size of heater

You can provide this heating capacity using one or more heaters. But each heater must meet the requirements in the healthy homes standards.

Your heater(s) must be fixed and not portable. They must each be at least 1.5 kW in heating capacity.

Your heater must not be an open fire or an unflued combustion heater, eg portable LPG bottle heaters. If you use a heat pump or an electric heater, it must have a thermostat. You cannot use an electric heater for a required heating capacity over 2.4 kW unless you're 'topping up' existing heating. Smaller 'top up' heaters must meet certain conditions (see below).

The healthy homes standards treat heat pumps differently from other electric heaters. Where the tool refers to an 'electric heater', this means an electric heater that is not a heat pump.

In most cases, the right type of heater will be a larger fixed heating device like a heat pump, wood burner, pellet burner or flued gas heater. In some cases, eg small apartments, a smaller fixed electric heater will be enough. For more information about different heating options visit the Energy Efficiency and Conservation Authority's website. (https://www.energywise.govt.nz/at-home/heating-and-cooling/)

You can still use heaters that don't meet these requirements. They won't need to be removed but they can't contribute to the heating capacity you need to meet the healthy homes standards.

Top up existing heating

If you're adding a new heater to a room with existing heating, each heater must meet the requirements in the healthy homes standards, with one exception. If your existing heating doesn't have the required heating capacity, you can add a smaller fixed electric heater to 'top up' your heating. If you do, you must meet all these conditions:

- you installed your existing heating before 1 July 2019
- each of your existing heaters meets the general requirements for heaters (listed above) and is not an electric heater (except for a heat pump)
- the required heating capacity is more than 2.4 kW, and
- the 'top up' you need is 1.5 kW or less.

For example, if you have a heat pump with a heating capacity of 3.3 kW, but you need a total heating capacity of 4.5 kW, you can add a fixed 1.5 kW electric heater with a thermostat to meet the standard. See further examples below.

You don't need to add more heating if you have one or more existing large heaters that meet all these conditions:

- were installed before 1 July 2019
- each have a heating capacity greater than 2.4 kW
- meet the requirements in the standards, and
- have a total heating capacity that's at least 90% of what you need.

Disclaimer

This tool is a 'heating capacity calculator' for the purposes of the Residential Tenancies (Healthy Homes Standards) Regulations 2019. As well as determining the required heating capacity, the Heating Assessment Tool will also provide information about the type of heating device that, if installed, would achieve compliance with the heating standard.

When the Heating Assessment Tool is used correctly it is intended to presume the required heating capacity for the main living room of a specific rental premises. Any person using it in good faith is entitled to rely on the report produced as being the correct result based on the information entered. Misuse of the Heating Assessment Tool may cause an incorrect result and impact on a landlord's compliance with the heating standard. Read the full disclaimer. (https://www.tenancy.govt.nz/about-tenancy-services/disclaimer/#id_30551108-heating-assessment-tool-disclaimer)

Examples

Here are some examples showing a required heating capacity and how you could provide heating that meets the healthy homes standards.

Example 1:

You need a total heating capacity of 5 kW. You have a heat pump, installed in 2018, with a heating capacity of 3.7 kW. You can add a fixed electric heater that is at least 1.5 kW to 'top up' your heating.

Example 2:

You need a total heating capacity of 8 kW. You have a fixed heat pump with a heating capacity of 4 kW and an unflued gas heater with a heating capacity of 3 kW. The unflued gas heater is an unacceptable heater type, which means it can't contribute to the required heating capacity. You can meet the standards by installing a 4 kW (or larger) qualifying fixed heater where it can heat the main living room directly. You cannot add an electric heater to 'top up' your heating because the 'top up' you need is over 1.5 kW.

Example 3:

You need a total heating capacity of 3.5 kW. You have a fixed heat pump with a thermostat and heating capacity of 3.3 kW, installed in 2014. You don’t need to add any more heating because your existing heating is a qualifying, larger heater that achieves at least 90% of the required heating capacity.

Rental property details

About your home

Your home's age and location

When was your home built: **From 1978 to 2000**
Region: **Canterbury**
Council rates paid to: **Selwyn District Council**
Zone: **3**
Assumed external temperature: **-4°C**

About your living room

Main living room

Main living room area: **32m²**
Number of staircases: **0**
Additional level 1 area: **0m²**
Additional level 2 area: **0m²**

Level 1

Wall 1

Type of wall: **external**
Length: **3.98m**
Height: **2.40m**
Area: **9.55m²**
Calculated area: **9.55m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.43kW**
Number of windows: **1**
Number of door glazing: **0**

Wall 1: Window 1

Glazing type: **double**
Length: **2.60m**
Height: **1.33m**
Area: **3.46m²**
Calculated area: **3.46m²**
R-Value: **0.26**
Default R-Value **0.26**

Wall 2

Type of wall: **external**
Length: **1.23m**
Height: **2.40m**
Area: **2.95m²**
Calculated area: **2.95m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.10kW**
Number of windows: **0**
Number of door glazing: **1**

Wall 2: Door 1 glazing

Glazing type: **double**
Length: **0.56m**
Height: **1.06m**
Area: **1m²**
Calculated area: **1m²**
R-Value **0.26**
Default R-Value **0.26**

Wall 3

Type of wall: **internal**
Length: **0.55m**
Height: **2.40m**
Area: **1.32m²**
Calculated area: **1.32m²**
R-Value: **0.4**
Default R-Value **0.4**
Wall Transmission Heat Loss: **0.04kW**
Number of windows: **0**
Number of door glazing: **0**

Wall 4

Type of wall: **external**
Length: **3.58m**
Height: **2.40m**
Area: **8.59m²**
Calculated area: **8.59m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.35kW**
Number of windows: **1**
Number of door glazing: **0**

Wall 4: Window 1

Glazing type: **double**
Length: **1.95m**
Height: **1.35m**
Area: **2.63m²**
Calculated area: **2.63m²**
R-Value: **0.26**
Default R-Value **0.26**

Wall 5

Type of wall: **external**
Length: **0.43m**
Height: **2.40m**
Area: **1.03m²**
Calculated area: **1.03m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.02kW**
Number of windows: **0**
Number of door glazing: **0**

Wall 6

Type of wall: **external**
Length: **3.11m**
Height: **2.40m**
Area: **7.46m²**
Calculated area: **7.46m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.33kW**
Number of windows: **1**
Number of door glazing: **0**

Wall 6: Window 1

Glazing type: **double**
Length: **1.95m**
Height: **1.35m**
Area: **2.63m²**
Calculated area: **2.63m²**
R-Value: **0.26**
Default R-Value **0.26**

Wall 7

Type of wall: **internal**
Length: **3.56m**
Height: **2.40m**
Area: **8.54m²**
Calculated area: **8.54m²**
R-Value: **0.4**
Default R-Value **0.4**
Wall Transmission Heat Loss: **0.23kW**
Number of windows: **0**
Number of door glazing: **0**

Wall 8

Type of wall: **external**
Length: **2.57m**
Height: **2.40m**
Area: **6.17m²**
Calculated area: **6.17m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.19kW**
Number of windows: **1**
Number of door glazing: **0**

Wall 8: Window 1

Glazing type: **double**
Length: **1.14m**
Height: **0.75m**
Area: **0.85m²**
Calculated area: **0.86m²**
R-Value: **0.26**
Default R-Value **0.26**

Wall 9

Type of wall: **external**
Length: **2.80m**
Height: **2.50m**
Area: **7.00m²**
Calculated area: **7.00m²**
R-Value: **1**
Default R-Value **1**
Wall Transmission Heat Loss: **0.15kW**
Number of windows: **0**
Number of door glazing: **0**

Wall 10

Type of wall: **internal**
Length: **2.57m**
Height: **2.40m**
Area: **6.17m²**
Calculated area: **6.17m²**
R-Value: **0.4**
Default R-Value **0.4**
Wall Transmission Heat Loss: **0.17kW**
Number of windows: **0**
Number of door glazing: **0**

Floor:

Floor Area: **32.00m²**
Space below floor: **external**
Standards compliance: **none**
Standards percentage: **0%**
Standards area: **0.00m²**
Standards R-Value **0**
Standards R-Value default **1.3**
Non-standards percentage: **100%**
Non-standards area: **32.00m²**
Non-standards R-Value **0.9**
Non-standards R-Value default **0.9**

Internal percentage: **0%**
Internal R-Value **0**
Internal R-Value default **0.5**
External percentage: **100%**
External R-Value **0.9**
External R-Value default **1.3**
Total area: **32.00m²**
Internal area: **0.00m²**
External area: **32.00m²**
Internal Transmission Heat Loss: **0.00kW**
External Transmission Heat Loss: **0.78kW**
Standards Transmission Heat Loss: **0.00kW**
Non-standards Transmission Heat Loss: **0.78kW**
Total Transmission Heat Loss: **0.78kW**

Ceiling:

Floor Area: **32.00m²**
Shape of ceiling: **flat**
Space above ceiling: **external**
Standards percentage: **100%**
Standards area: **32.00m²**
Standards R-Value **2.4**
Standards R-Value default **2.4**
Non-standards percentage: **0%**
Non-standards area: **0.00m²**
Non-standards R-Value: **0**
Non-standards R-Value default: **1.9**
Internal percentage: **0%**
Internal R-Value: **0**
Internal R-Value default: **0.5**
External percentage: **100%**
External R-Value: **2.4**
External R-Value default: **2.4**

Flat area: **32.00m²**
Irregular area: **0.00m²**
Total area: **32.00m²**
Internal area: **0.00m²**
External area: **32.00m²**
Internal Transmission Heat Loss: **0.00kW**
External Transmission Heat Loss: **0.29kW**
Standards Transmission Heat Loss: **0.29kW**
Non-standards Transmission Heat Loss: **0.00kW**
Total Transmission Heat Loss: **0.29kW**
Number of skylights: **0**

Level Summary:

Volume of Level: **80m³**
Transmission Heat Loss: **3.09kW**
Ventilation Heat Loss: **0.60kW**
Additional heating-up power: **1.28kW**

Result

Transmission Heat Loss: **3.09kW**
Ventilation Heat Loss: **0.60kW**
Additional heating-up power: **1.28kW**
Heat load of the heated space: **5kW**
Heat load of the heated space (w/o heating-up power): **3.69kW**