

INFINITY HD49 Series Product technical statement

A product technical statement is a way to show how a product or system is fit for purpose for use in New Zealand and to demonstrate compliance with the New Zealand Building Code (Building Code Amendment Act 2013).

Product description

Designed and made in Japan, the Rinnai INFINITY HD49 Series are continuous flow gas hot water heaters with inbuilt frost protection. They have electronic ignition and require electricity to operate. The internal unit is a room sealed appliance and has an inbuilt controller on the front panel. The external unit has a status monitor.

Model selection is based on the application.

They are factory set to deliver water at 50 °C, but can be set to deliver higher temperatures, up to 85 °C, making them ideal for commercial applications.

Scope of use

Suitable for residential and commercial applications. The external HD49kWe is designed to be externally mounted on an outside wall, while the HD49kWi is for indoor installations.

For optimal performance, they should be positioned as close as possible to the most frequently used hot water outlets, minimising the wait time for hot water delivery.

They are not suitable as a spa or swimming pool heater, or for hydronic applications.

Hard or acidic water will need to be treated to use this product.

Available for connection to natural gas or LPG, this must be specified at the time of purchase.

Flue terminations must comply with the flue terminal locations shown in AS/NZS 5601.1.

Design guidelines

Specification and installation must be in accordance with Rinnai installation requirements and with the Building Code.

Rinnai specify that installation must be in compliance with AS/NZS 5601.1, AS/NZS 3000, and AS/NZS 3500.

The Rinnai HD49kWi must be installed with a Rinnai approved flue system.



HD49kWe



HD49kWi

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Compliance with the NZ Building Code

If specified, installed and maintained in accordance with all Rinnai requirements the INFINITY HD49 Series will comply with the below provisions of the NZ Building Code. AS/NZS 5601.1 is an acceptable solution within the NZBC for gas installations as per NZBC G11/AS1 9.0.1.

CODE CLAUSE	EVIDENCE OF COMPLIANCE
B1 Structure	
B1.3.1 B1.3.2 B1.3.3 (a,b,c,h,m)	The INFINITY HD49 Series units are certified to AS/NZS 5263.1.2 / AS/NZS 4552, a series of standards for safety, performance and energy efficiency in gas fired water heaters for hot water supply and/or central heating.
B2 Durability	
B.2.3.1 (c)	Durability testing and in-service history
C2 Prevention of fire occurring	
C2.2 and C2.3	Certification of continuous flow gas water heaters to AS/NZS 5263.1.2 / AS/NZS 4552
E2 External moisture	
E2.3.2	Achieved by following E2/AS1
G4 Ventilation	
G4.3.3 (f,i)	Achieved as long as the building complies with G4/AS1
G9 Electricity	
G9.3.1 (a,b,c,d,f), G9.3.3	G9/AS1 as required by Rinnai installation guidance
G10 Piped services	
G10.3.2, G10.3.3, G10.3.4, G10.3.5, G10.3.6	G10/AS1 (NZS 5422 Natural Gas) and (NZS 5435 LPG)
G11 Gas as an energy source	
G11.3.1, G11.3.2, G11.3.3, G11.3.4	G11/AS1 (AS/NZS 5601.1) as required by Rinnai installation guidance
H1 Energy efficiency provisions	
H1.3.4	Certification of continuous flow gas water heaters to AS/NZS 4552.2* (Minimum energy performance standards for gas water heaters)
G12/AS1 Water Supplies	
G12/AS1 16.14.1	Safe water temperatures, HD49 models are factory set to 50 °C

* Some provisions of the AS/NZS 5263.1.2 apply to Australia only (e.g. thermal efficiency), which is why we have noted the equivalent AS/NZS 4552 standard.

Additional evidence to support the above statements

Energy Safety Supplier Declaration of Compliance:

- INFINITY HD49 Series: Declaration number DEC-000001841X8M7

Special conditions: Installation requirements

Full appliance and flue information can be found at www.rinnai.co.nz.

Limitation: To be installed in accordance with all Rinnai installation requirements and by a licensed gasfitter/plumber, and electrician. Upon completion of the installation, a final inspection and test to demonstrate that the gas appliance has been installed in accordance with Rinnai's instructions and in accordance with Gas (safety and measurement) Regulations is required by the installer. The gasfitter is to issue a certificate of compliance.

Special conditions - maintenance requirements

For reliable operation Rinnai INFINITY units, in residential applications, should be serviced every two years*. In commercial installations every 10,000 hours or annual* servicing (whichever comes first) is recommended. Installation, servicing and repair shall be carried out only by authorised personnel.

* Also includes the flue system if an internal unit