

Smart Indoor Cylinders

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 assembled in New Zealand, with the inner cylinders made in the UK, and Turkey. Rinnai Smart cylinders are available in:

- 3 kW mains pressure stainless steel (135, 180, and 250 L)
- 3 kW mains pressure enamel (135, 180, and 250 L)
- 3 kW low pressure stainless steel (135, 180, and 250 L)

Model selection will be dependent on the hot water demand of the property.

The Rinnai Smart cylinder has a thermostat which learns the usage pattern of hot water use, and then only heats the hot water when it knows it's going to be needed. This smart system typically saves up to 10% of water heating costs.

To meet the New Zealand Building Code requirement¹ to disinfect water for legionella bacteria, the system will perform heating above 60 °C whenever risk conditions are detected.

¹ Clause G12.3.9, Acceptable Solution G12/AS1 6.14.3

Scope of use

Suitable for residential indoor water heating applications—mains and low pressure systems. The system should be located and arranged so as to achieve the closest proximity to water draw off points.

Not suitable as a spa or swimming pool heater, or for connection to an open loop solar or hot water heat pump system.

Bore and tank water supplies should be considered to be corrosive and should be tested prior to using the system. For more information on water quality refer to the water quality statement in the owner and installer guide, available online.

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 3000, and AS/NZS 3500.

Where there is potential of damage occurring from a leaking system, a suitably drained safe tray must be fitted as per AS/NZS 3500.4:2015 5.4 and G12/AS1 6.11.3.

Quality assurance

- ISO 9001 Certified System
- ISO 14001 Certified System



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Compliance with the NZ Building Code

If specified, installed, and maintained in accordance with all Rinnai requirements the Rinnai Smart cylinders will comply with the below provisions of the NZ Building Code.

CODE CLAUSE	EVIDENCE OF COMPLIANCE
G9 Electricity	
G9.2, G9.3.3	Cylinders approved to AS/NZS 60335.2.27
G12 Water supplies	
G12.3.8	Cylinders approved to AS/NZS 60335.2.27
G12.3.9	Acceptable solution G12/AS1 6.14.3, the system will perform heating above 60 °C whenever risk conditions (< 60 °C for 21 days) are detected.
H1 Energy efficiency provisions	
H1.3.4	Cylinders meet the requirements of the minimum energy performance standards (MEPS) by cylinder approval to NZS 4606 (Storage water heaters - General requirements), and AS/NZS 4692.1:2005 (Electric water heaters - Energy consumption, performance and general requirements)

Additional evidence to support the above statements

Supplier Declaration of Compliance:

- SDoC identification number - Rinnai Smart Cylinders SDoC

Electrical safety approval

- Certificate of approval number - ESV180024

Special conditions: Installation requirements

Full appliance 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 cylinder has been installed in accordance with Rinnai's instructions is required by the installer. The installer is to issue an electrical safety certificate upon completion.

Special conditions - maintenance requirements

For reliable operation Rinnai cylinders should be maintained and serviced as detailed in the owner and installer guide. Installation, servicing, repair, and removal shall be carried out only by authorised personnel.