

A Product Technical Statement (PTS) 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 manufactured in the UK, and Turkey, Rinnai Smart cylinders are available in:

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



Smart cylinder range

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

The Rinnai Smart cylinder has a smart 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, typically saving up to 10% of water heating costs.



Smart control

Scope of use

Suitable for residential indoor water heating applications—mains and low pressure systems.

A Smart cylinder is ideal for households that have a regular pattern of hot water use, as consistency is key. Also there is some interaction needed with the Smart controller, which is mounted on the cylinder. Easy access to the cylinder and controller is important.

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

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 (<60 °C for 21 days) are detected.



Smart control on cylinder

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

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 3000:2007, and AS/NZS 3500.

As per AS/NZS 3500.4:2015 5.4 and G12/AS1 6.11.3, the cylinder **MUST BE** installed with a suitably drained drip tray/catch pan.



Quality assurance

- ISO 9001 Certified System
- ISO 14001 Certified System



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
G9.2, G9.3.3	Cylinder approval to AS/NZS 60335.2.27
G12.3.8	Cylinder approval to AS/NZS 60335.2.27
G12.3.9	Acceptable solution G12/AS1 6.14.3, the the system will perform heating above 60 °C whenever risk conditions (<60 °C for 21 days) are detected.
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

Seismic restraint

Cylinders should be installed on a flat level base of sufficient strength to support the weight of the water heater when full. The water heater must also be suitably restrained against seismic activity, 'G12/AS1 Figure 14' details an acceptable method of restraint.

Special conditions - installation requirements

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

Limitations: 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 to be done 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 and repair shall be carried out only by authorised personnel.

