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### Interactive

www.rinnaiuk.com and register for an account



Renewable

Commercial

Domestic



Training

Rinnai

Hot water solutions

# Training Courses & CPDs



# Rinnai

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Experience our innovation

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# Experience our innovation - with training at a location that suits your business

As a part of the Global Rinnai Group and as the UK and European leader in supply of continuous flow water heating technology for Commercial, Domestic and Renewables, Rinnai is at the forefront of innovative and efficient systems and technology.

With the UK water heating industry facing a myriad of environmental and politically driven market forces, including the need to reduce Carbon Emissions within new and existing buildings in the short, medium and long term. We seek to clarify and engage with the market to assist decision making and understanding of the different messages faced by todays engineers, installers and designers.

We will demonstrate how innovation can reduce the burden on fossil fuels whilst maximising renewable gains. We will look at the growing support for continuous flow technologies and how this can benefit new and existing buildings versus traditional systems including gas fired storage. We will analyse water heating design and sizing discussing technical issues associated with product installation and Specification. Specific training can be tailored to cover all aspects of the commissioning and service process.

To deliver consistency, Rinnai has invested in a successful combination of fully equipped training facilities as well as CPD courses supported by our mobile training vehicle. Courses can also be delivered in lunch time bite-size format.

So to increase your knowledge, skills, expertise and value with a growing product category trust Rinnai's unique and proven experience in innovative training.

### **Tony Gitting**

Managing Director





# Welcome to Training HQ



At Rinnai, we regard the professional development of installers, contractors, specifiers, designers and general market practitioners as key to our long-term goal of providing innovation to the market.

Our training facility vehicle and CPD training courses ensure key market personnel at all levels can benefit from nationwide training from our highly skilled team of technical experts. Ensuring they are up to speed with changes in legislation and product developments.

### Chris Goggin

Associate Director





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# Course 1 Rinnai Product Overview

Rinnai - global leader Introduction to Rinnai energy saver convection The function and operation of the energy savers Flueing Introduction to Infinity water heaters Instantaneous technology compared to Rinnai (continuous flow) Infinity range of water heaters operation Condensing technology Infinity low NOx technology Flueing guidance Common headed flue system Installation requirements Temperature control Basic system design Commercial system design Controls System comparisons Basic maintenance

### Quick reference - Whats involved

energysaver

Infinity Infinity Plus Infinity Low Nox

Infinity Plus renewables

Infinity Plus storage Infinity Controls

#### Course Length - Full day

### Course Rational

This course explains the complete range of Rinnai heating products, their basic operation and installation. The candidates will be given an insight into the Energy saver convector heaters, the Infinity range of water heaters and controls.

The basics of the system design for both the Energysaver and Infinity range will be discussed as well as the fundamentals of commissioning and servicing.

#### Insight

The course also covers our patented burner technology as well as our advanced heat exchanger system.









# Training Courses & Content

### Course 2 Continuous flow and the future of water heating

Rinnai - global leader

The Principles of traditional DHW

The Principles of continuous flow DHW

How the Infinity range of water heaters operate

Range of standard efficiency water heaters

When the use of storage is acceptable

Range of condensing water heaters

Infinity low NOx technology range

Flueing configurations

Temperature control

System design

Benefits of modular system

Sequencing

BMS control options

Quick reference - Whats involved









Course Length - Full day (Bite-size available)

### Course Rational

Overview of continuous flow technology. So that at the end the candidates will have a basic understanding of the function  $% \left\{ 1\right\} =\left\{ 1\right\} =\left\{$ of the heaters and system design principles for efficiency and maximum performance.

### Course 3 Intermediate water heater

Rinnai - global leader

Difference in DHW Systems

The functionality of the Rinnai range of water heaters

The identification and operation of all major components within the heater.

Installation requirements

Flueing

Temperature control

Controls

System design

Legislation

BMS integration

Warranty parameters

Quick reference - Whats involved









Course Length - Full day (half day available)

#### Course Rational

This course is designed to give a good understanding of the Infinity water heaters; functionality, major components and servicing requirements. As well as good level of understanding of the continuous flow hot water system and how to correctly size a system and design systems to satisfy regulatory and performance demands.











# Training Courses & Content

### Course 4 Continuous flow -Excellence in design

Rinnai - global leader

Heat energy & sizing for capacity

Non storage hot water solutions

Storage solutions when to use and how to calculate

Sealed system components & G3 requirements

Basic hydraulics

ACOP L8

Building regulation (Part L)

BMS integration





### Quick reference - Whats involved









Course Length - Full day (half day available)

#### Course Rational

This course gives an in depth explanation into design parameters of a continuous flow hot water system. covering; heat energy and how it is used in sizing of a system, when to use and how to size a storage system. The components that have to be fitted to satisfy G3 requirements, basic hydraulics and an understanding of ACOP L8 and building regulation efficiencies.

### Course 5 Service and fault diagnostics (Water heaters)

Rinnai - global leader

Continuous flow water heater functionality

Water heater components, functions & error diagnostics

Use of controllers for water heater fault interrogation

Error codes and their meanings

Basic system design

System arrangement, cascade, storage & sequencing

System design faults and implications on the water heater

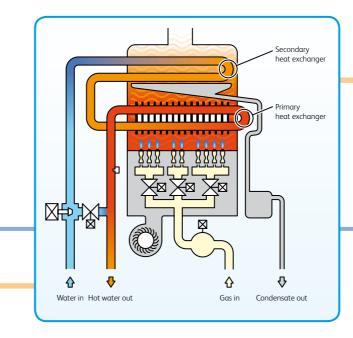
### Quick reference - Whats involved



Course Length - Full day (half day available)

### Course Rational

Specific course aimed at maintenance and service personnel. This will give them a thorough knowledge of the functionality of the Rinnai water heaters as well as an in depth knowledge on the service and fault finding on the Rinnai range of water heaters; as well as being able to diagnose the difference between a system and a heater fault

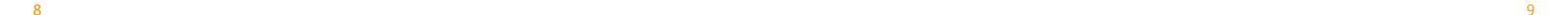












### Course 6 Service and fault diagnostics (Energy savers warm air units)

Rinnai – Global Leader

Energy saver functionality

Major component identification

Error codes and meanings

Central timer control connections

### Course 7 Understanding ACOP L8 and hot water design

Rinnai - global leader

ACOP L8 what is it and how continuous flow hot water systems help

How it effects a continuous flow system

How to utilise the close temperature control of Rinnai water heaters to their maximum

Rinnai pure system functionality

### Quick reference



Course Duration - 5 hours

#### Course Rational

A specific course aimed at maintenance and service personnel. To give them a thorough insight into the functionality of the Rinnai space heaters; as well as how to service and diagnose faults on the heaters.

Course Duration - 4 hours (Bite-size available)

### Course Rational

This is a generic course aimed at installers, maintenance personnel and designers. This will give a basic understanding of the requirements of L8 and how it effects water systems. This will cover the use of low temperature systems; as well as the use of the Rinnai pure system for pasteurisation.

### Course 8 Maximising renewable gain in hot water design

Rinnai – Global Leader

The Synergy between renewable energy and the continuous flow system

The use of different renewable energy sources

The design of a renewable pre-heat solution

How to gain the maximum benefit from renewable

### Course 9 Continuous flow as a

method of satisfying energy & regulatory demand

Rinnai – Global leader

Satisfying energy demand

Reducing carbon

Eco - design

Compliance ACOP L8, Part L

BMS controls for a smart future

### Quick reference



Course Duration - 4 hours (Bite-size available)

#### Course Rational

Aimed at demonstrating the combined use of a renewable energy as the prime source of maximising renewable gains as the Rinnai continuous flow system only provides energy when necessary.

Course Duration - 4 hours (Bite-size available)

#### Course Rational

This course highlights how Rinnai technology can be applied to satisfy the ever changing regulatoring horizon.

Insight: Includes Part L, Eco-design, ACOP L8, G3 and many more.



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