

Gas Appliance Testing and Certification
Guide

Place certified gas valves, fittings, and appliances on the market



Who is BSI?

The British Standards Institution (BSI) is a globally recognized national standards body and a leader in testing, certification, and compliance services. Within BSI, the Product Certification division works with manufacturers to ensure that gas appliances meet essential safety, energy efficiency, and regulatory requirements for UK and EU market access.

For gas appliance manufacturers, BSI offers:

- Third-party testing and certification to key gas safety standards (e.g., BS EN standards)
- Support with CE and UKCA marking under the Gas Appliance Regulation (GAR)
- The trusted BSI Kitemark™, demonstrating proven safety, performance, and consumer assurance

BSI helps you confidently navigate complex compliance landscapes, supporting safe product installation, reliable performance, long-term energy efficiency, and brand trust.



What is gas appliance testing and why is it required?

Gas appliance testing ensures that your product complies with safety, performance, and efficiency requirements under the Gas Appliance Regulation (GAR). Testing is essential for CE and UKCA marking and helps demonstrate that appliances are safe to use, perform reliably, and are fit for installation in homes and businesses.



What types of gas appliances need testing?

Any appliance powered by gas and intended for household or commercial use must undergo testing. Examples include:

- Gas cooking appliances (e.g., hobs, cookers, ovens)
- Commercial catering appliances (e.g., fryers, grills, ovens)
- Domestic and commercial gas boilers
- Instantaneous water heaters and combi boilers



What standards apply to my gas appliances?

The appropriate standard depends on your product type and intended use. Common standards include:

- BS EN 30 series Safety for domestic gas cooking appliances
- BS EN 203-1 Safety for commercial catering gas appliances
- BS EN 15502-1 General safety for gas-fired boilers
- BS EN 13203-2 Energy efficiency for gas-fired water heaters

BSI will help you identify the correct standard for testing and certification, including those relating to safe installation and gas fitting procedures.



What is the Gas Appliance Regulation (GAR)?

The Gas Appliance Regulation (EU 2016/426), adopted into UK law post-Brexit, covers appliances burning gaseous fuels. It ensures appliances are safe, energy-efficient, and suitable for installation. Compliance with GAR is required to affix CE or UKCA marks, enabling access to EU and UK markets.



What is CE and **UKCA** marking?

CE marking is mandatory for gas appliances placed on the European market, indicating compliance with EU legislation such as GAR.

UKCA marking is required for products sold in Great Britain and demonstrates conformity with UK safety, performance, and installation regulations. Both markings require testing, a technical file, and a declaration of conformity.



What is the BSI Kitemark™ and why should I get it?

The BSI Kitemark™ is a voluntary mark of trust that shows your product has been independently tested to meet rigorous safety, performance, and energy efficiency standards. It demonstrates long-term compliance, supports safe and professional fitting, and is widely recognized by consumers, specifiers, and installers.

Your steps to success

Note: This guide outlines key stages of the testing and certification process. It is not a full technical manual.

Step 1

Identify Applicable Standards

- BS EN 30-1-1, 2, 3, 4 Domestic gas cooking appliances (e.g., hobs, cookers)
- **BS EN 203-1** Commercial catering gas appliances (e.g., fryers, ovens)
- **BS EN 15502-1** Gas-fired boilers (e.g., wall-mounted boilers)
- BS EN 13203-2 Energy performance of water heaters and combi boilers

Use our Gas Appliance Standards Checklist to help determine the relevant requirements for your products.

Step 2

Read and Understand the Standards

 Review essential safety, combustion, thermal efficiency, and installation requirements

Consider consulting an Associate Consultant via BSI's ACP Programme to help interpret standards and prepare documentation.

Step 3

Prepare Technical Documentation

- Detailed design and engineering drawings
- Component and material specifications
- Risk and combustion safety assessments
- Test reports and energy performance data
- · Installation and fitting instructions
- User guides and maintenance manuals

Step 4



Get in touch with BSI for Testing and Evaluation

- Submit products for laboratory testing against applicable standards
- Undergo factory production control assessments to verify consistency
- Implement any required changes or corrective actions to resolve nonconformities



Other Schemes and Market-Specific Marks to Consider



CE Marking

Mandatory for gas appliances sold in the EU, CE marking demonstrates compliance with all applicable EU directives and regulations, including GAR.



UKCA Marking

Required for the Great Britain market, UKCA marking confirms conformity with UK product safety regulations for gas appliances.

Gas Appliance Regulation (GAR)

GAR establishes essential safety, energy, and fitting requirements for gas appliances in the EU and UK. Products must meet GAR requirements to receive CE or UKCA marking.



BSI Kitemark™

A voluntary but highly regarded certification that shows your appliance meets and continues to meet high standards of safety, performance, energy efficiency, and installation suitability. It adds value for consumers, specifiers, and installers.

Ensure the test standard requirements of these Schemes and Market-Specific Marks have been identified for inclusion in your certification and testing journey.

Start your gas appliance certification journey:

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