

Specification for

Installation of gas-fired hot water boilers of rated input not exceeding 60 kW

UDC 696.2:[683.97+697.3]

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents

AVA

Document Sharing Hub

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Gas Standards Committee (GSE/-) to Technical Committee GSE/30, upon which the following bodies were represented:

- British Gas plc
- Consumer Standards Advisory Committee of BSI
- Department of Energy (Gas and Oil Measurement Branch)
- Health and Safety Executive
- Institution of Gas Engineers
- Liquefied Petroleum Gas Industry Technical Association (UK)
- Society of British Gas Industries
- Trades Union Congress

The following body was also represented in the drafting of the standard:

- Water Research Centre

This British Standard, having been prepared under the direction of the Gas Standards Committee, was published under the authority of the Board of BSI and comes into effect on 30 April 1987

© BSI 11-1998

First published, as CP 332.303 and subsequently renumbered CP 332-2, June 1951
First revision August 1964
Second revision, as BS 5376-2, July 1976
Third revision, as BS 6798, April 1987

The following BSI references relate to the work on this standard:
Committee reference GSE/30
Draft for comment 84/77885 DC

ISBN 0 580 15644 3

Amendments issued since publication

Amd. No.	Date of issue	Comments
8131	March 1994	Indicated by a sideline in the margin

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Selection and installation of boiler	1
4 Flueing	2
5 Location	2
6 Installations	2
7 Protection	6
8 Gas supplies and pipework	7
9 Water supplies and pipework	7
10 Electricity supplies and wiring	8
11 Connection to the flue	8
12 Air supply for combustion and ventilation	8
13 Inspection	8
14 Commissioning	9
15 Advice to user	9
Appendix A Items for consideration and official bodies that may have to be consulted before installation	10
Publications referred to	Inside back cover

Foreword

This British Standard has been prepared under the direction of the Gas Standards Committee. It is a revision of the code of practice, BS 5376-2:1976, which is withdrawn. During the preparatory work the committee responsible for this standard considered that many of the operations for installation of 1st, 2nd and 3rd family gas appliances should be mandatory if a safe installation were to result. The opportunity was, therefore, taken to present this revision in the form of a practice specification and under a new BS number.

NOTE This standard has been written in the form of a practice specification (see clause 6 of PD 6501-1:1984). To comply with this specification, the user has to comply with all of its requirements. He may depart from recommendations, but this will be on his own responsibility and he will be expected to have good reasons for doing so.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations. In particular, attention is drawn to the Gas Safety (Installation and Use) Regulations 1984, the Building Regulations of England and Wales, and of Scotland, the Regulations for electrical installations (ed. 15) 1981 (Institution of Electrical Engineers) and the Water Byelaws.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies the selection and installation, of gas-fired central heating boilers not exceeding 60 kW total rated heat input and the inspection and commissioning of the resulting installations.

It applies to boilers utilizing 1st, 2nd and 3rd family gases designed to operate in the condensing or non-condensing mode for the heating of domestic or commercial premises by the circulation of heated water in open or closed systems.

This standard does not include boilers with a rated input of over 60 kW as specified in BS 6644 nor does it include the detailed design and installation of the whole heating system as described in BS 5449-1.

NOTE The titles of publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard the definitions given in BS 1179:1967 and BS 1179-6 apply, together with the following.

2.1

bathroom

a room specifically designed to contain a bath or shower

2.2

boiler compartment

an enclosure specifically designed or adapted to house a gas boiler

2.3

boiler rated output

the rate at which heat is transferred to water flowing through the boiler when working at its rated heat input under standard test conditions

2.4

combination boiler

an appliance designed to provide central heating hot water and domestic hot water without the need for additional secondary storage

2.5

combination unit

an appliance with an integral hot water storage cylinder

2.6

condensing boiler

a boiler designed to make use of the latent heat in the combustion products water vapour by condensing water vapour within the appliance

2.7

open-flued appliance

an appliance designed to be connected to an open-flue system, its combustion air being drawn from the room, space or enclosure in which it is installed

2.8

open system

a central heating system incorporating a water circuit that is open to the atmosphere through a feed cistern and an open vent pipe

2.9

room-sealed appliance

an appliance in which the combustion air supply and flue system is not open to the room, space, or enclosure in which it is installed

2.10

sealed system

a central heating system incorporating a water circuit that is not open to the atmosphere

3 Selection and installation of boiler

3.1 General

The boiler shall comply with the requirements of BS 5258-1 if it is a central heating boiler or circulator or with the requirements of BS 5258-8 if it is a gas fire/back boiler. The boiler shall only be connected to and supplied with the gas for which it was designed.

The boiler shall only be fitted with external control devices, e.g. flue dampers or economizers, as approved by the boiler manufacturer.

In order to ensure they incorporate the appropriate protection devices boilers intended to be used in a sealed system shall be selected from those specifically designated for this purpose by the manufacturer.

Boilers designed to be used in the condensing mode shall be installed in accordance with the manufacturer's installation instructions which will describe any additional particular requirements, e.g. water temperature operating range and arrangements for the disposal of condensate.

COMMENTARY AND RECOMMENDATIONS ON 3.1.

Collaboration is essential between those concerned with the selection, design and installation both at the planning stage and during execution of work. Particular matters that should be considered are listed in appendix A.