

Specification for

Paraffin unflued space heating and cooking appliances for domestic use

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Furniture and Household Equipment Standards Committee (FHM/-) to Technical Committee FHM/31, upon which the following bodies were represented:

- British Steel Industry
- Chief and Assistant Chief Fire Officers' Association
- Consumer Standards Advisory Committee of BSI
- Department of Trade and Industry (Consumer Safety Unit, CCS Division)
- Engineering Equipment and Materials Users' Association
- Home Office
- Oil Appliances Manufacturers' Association
- Royal Society for the Prevention of Accidents
- Coopted member

This British Standard, having been prepared under the direction of the Furniture and Household Equipment Standards Committee, was published under the authority of the Board of BSI on 28 February 1985 and comes into effect on a date to be announced (see foreword)

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The following BSI references relate to the work on this standard:
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Foreword

This revision of BS 3300 has been prepared under the direction of the Furniture and Household Equipment Standards Committee. It is a revision of BS 3300:1974 but it will become effective only when the Oil Heaters (Safety) Regulations are revoked and replaced by new Regulations made under the Consumer Safety Act 1978. Withdrawal of BS 3300:1974 will be announced at the appropriate time.

NOTE Upon publication of this revision BSI Sales Department will respond to purchase orders for BS 3300 by supplying copies of the 1985 edition. Copies of the 1974 edition may be obtained by quoting this number "BS 3300-74".

The 1960 edition of the standard was a revision of BS 2049-1:1953 and embodied many advances in safety requirements as compared with the original standard.

The standard was revised in 1963 when the main changes were strengthening of safety requirements for the spillage test for barometric feed space heating appliances, and for operation under out-of-level conditions. The standard was later amended to specify that all heating appliances should extinguish themselves if overturned when alight.

The standard was revised again in 1974 to metricate it and to take account of the requirements for fireguards in BS 1945.

This revision has been undertaken to make the standard suitable for use as the basis of a revision of the Oil Heaters (Safety) Regulations 1977, to clarify certain of the requirements and test methods and to take into account technical advances.

The fuel used in the appliances covered by this standard, C1 burner fuel in accordance with BS 2869-2, is now more correctly termed paraffin and all previous references to kerosine have been amended accordingly where C1 burner fuel is intended.

Users of this standard may wish to note that all unflued domestic paraffin heating appliances offered for sale in Great Britain are required to comply with the Oil Heaters (Safety) Regulations 1977, which are to be remade under the Consumer Safety Act 1978. These remade regulations will be based on BS 3300 and will be consistent with it.

Certification. It is strongly recommended that in view of the nature of this specification, manufacturers and purchasers should make use of the certification facilities described on the inside back cover of this standard.

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.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 26, 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 construction and performance requirements for unflued space heating and cooking appliances intended by the manufacturer for domestic use and using paraffin as the fuel.

NOTE The titles of the publications referred to in this standard are listed on the 26.

2 Definitions

NOTE Terms used to describe the basic component parts of appliances covered by this British Standard are given in, and illustrated by, Figure 1 to Figure 7.

For the purposes of this British Standard the following definitions apply.

2.1

kindler type burner

a burner in which the fuel feeding device consists of a trough in which there is a kindler for lighting purposes

2.2

long drum burner

a burner fitted with a flue or chimney to induce a flow of air for combustion

2.3

pressure burner

a burner consisting of a burner head with a cavity, in which the paraffin is vaporized by the heat of the flame or by a separate heat supply. The vapour emerges from a nipple or injector in such a manner that the kinetic energy is utilized to entrain and mix the primary combustion air with the vapour. The pressure is usually generated by a hand-operated air pump but some automatic method or a gravity head may be used

2.4

short drum burner

a burner consisting of one or more pairs of perforated sleeves or plates mounted above a fuel feeding device. Paraffin vapour is burned mostly in the space between the sleeves and partly above them, producing a non-luminous blue flame. The long drum that forms an essential feature of 2.2 is not required

2.5

full fuel level

the level marked or indicated on the appliance as the maximum to which it may be properly filled with fuel or, where no such level is marked or indicated, the highest level to which the appliance can be filled with fuel without overflowing when it is standing on a rigid flat surface which is accurate to within 2° of the horizontal plane

2.6

self-extinguishing facility

a mechanism or other provision incorporated in the design of a space heating or cooking appliance to extinguish the flame of the appliance if it is overturned when alight

2.7

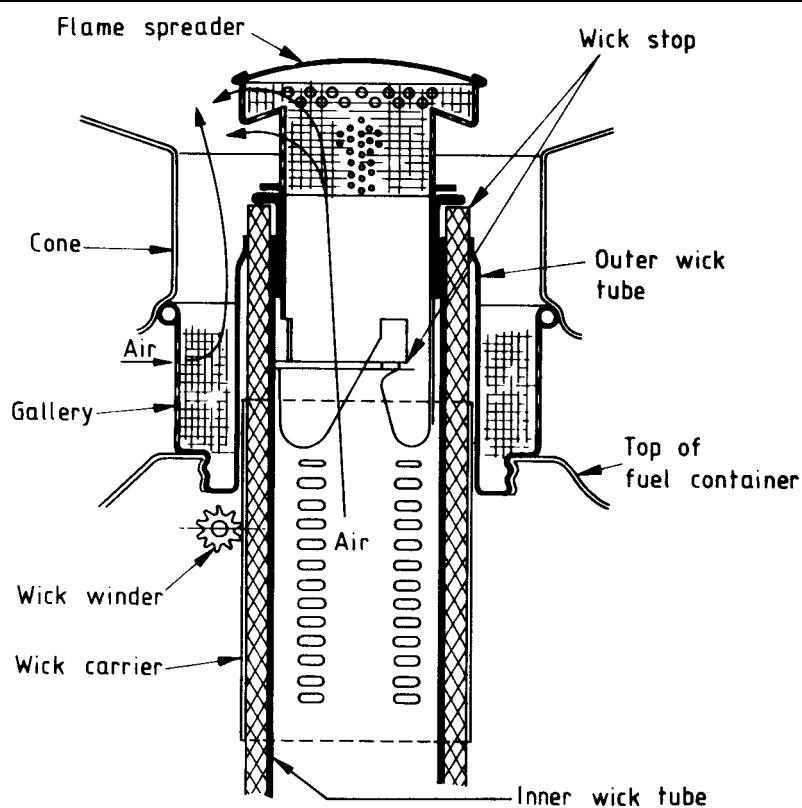
unflued appliance

an appliance designed to emit combustion products into the room (space) occupied by the appliance

2.8

working surface

a surface of an appliance necessarily at a high temperature to permit efficient functioning, including that part of the casing which acts as a screen round a short drum burner, the outlet grill of a convector heater and the chimney and hotplate of a cooking appliance



NOTE Figure 1 to Figure 7 are intended to be illustrative of typical burner types but do not otherwise form part of the standard.

Figure 1 — Long drum burner: white flame type

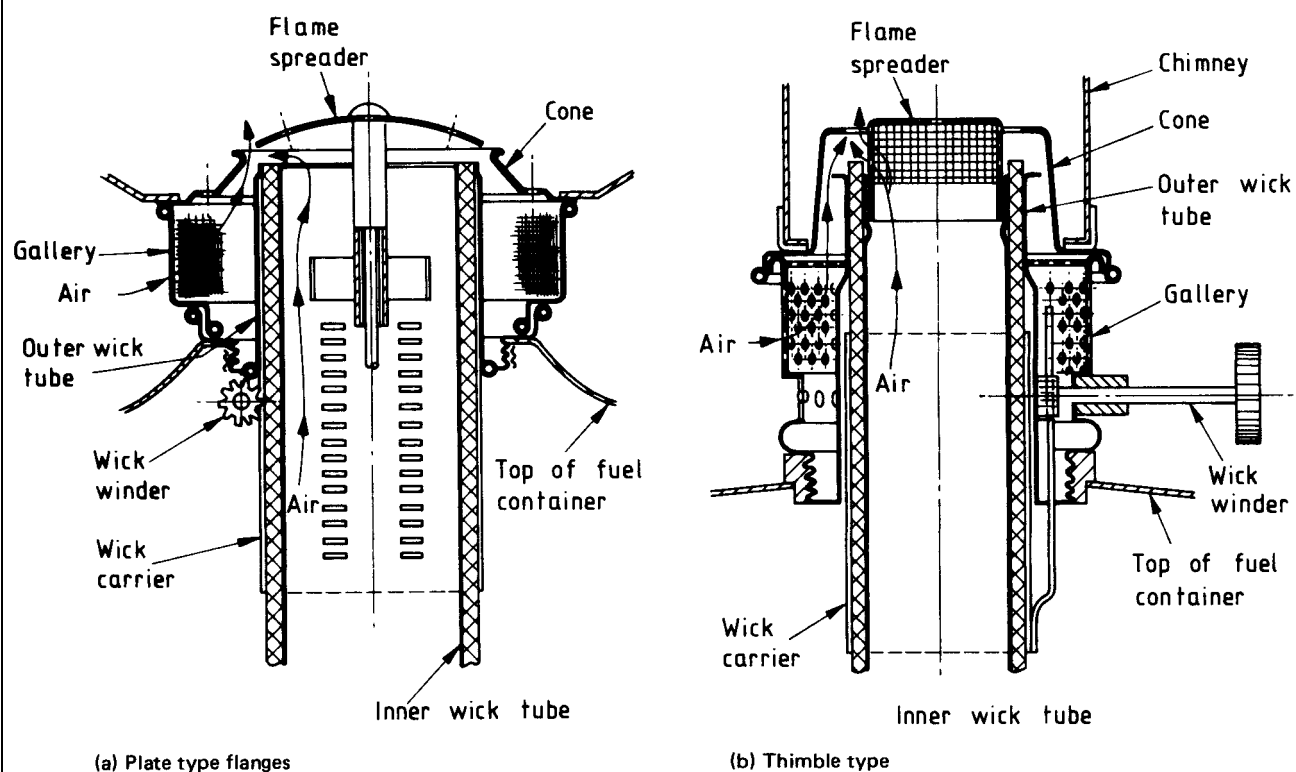
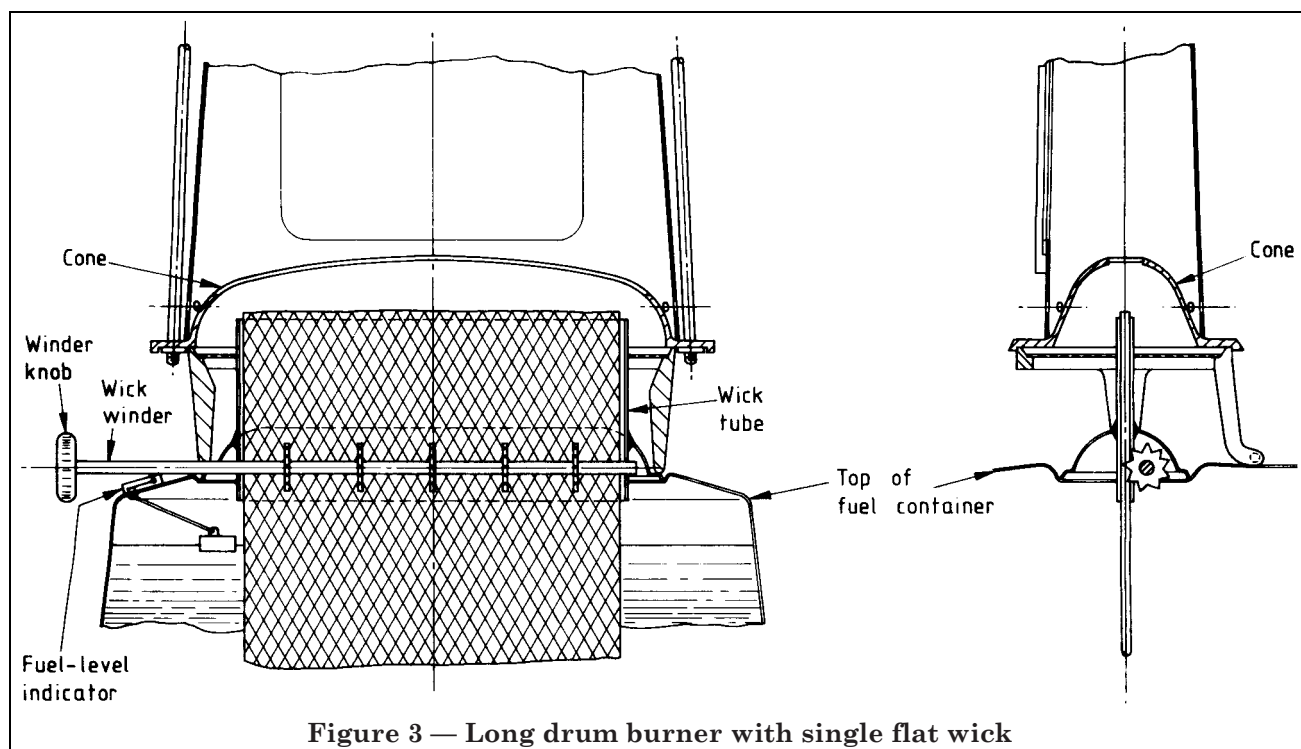


Figure 2 — Long drum burner: blue flame type



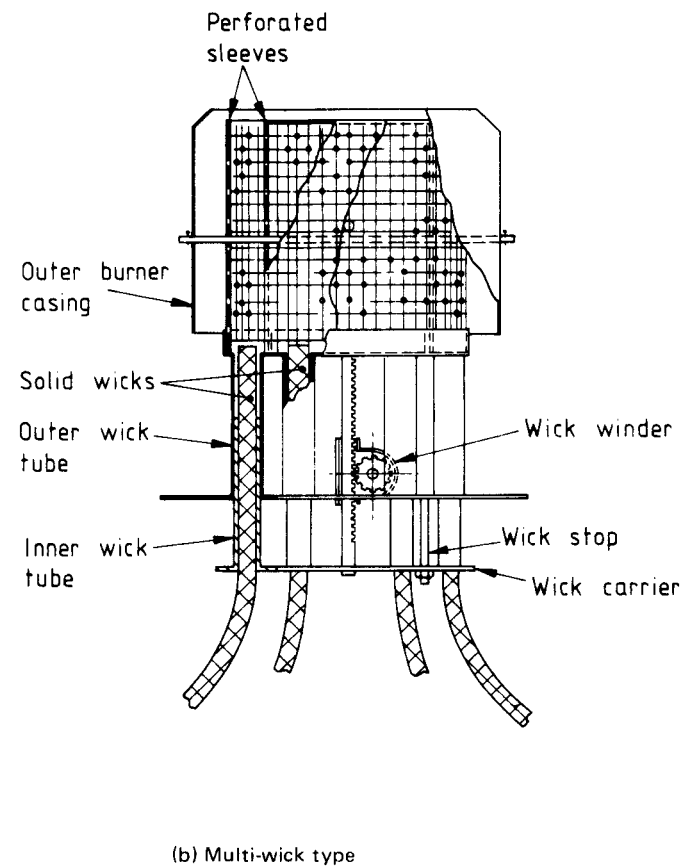
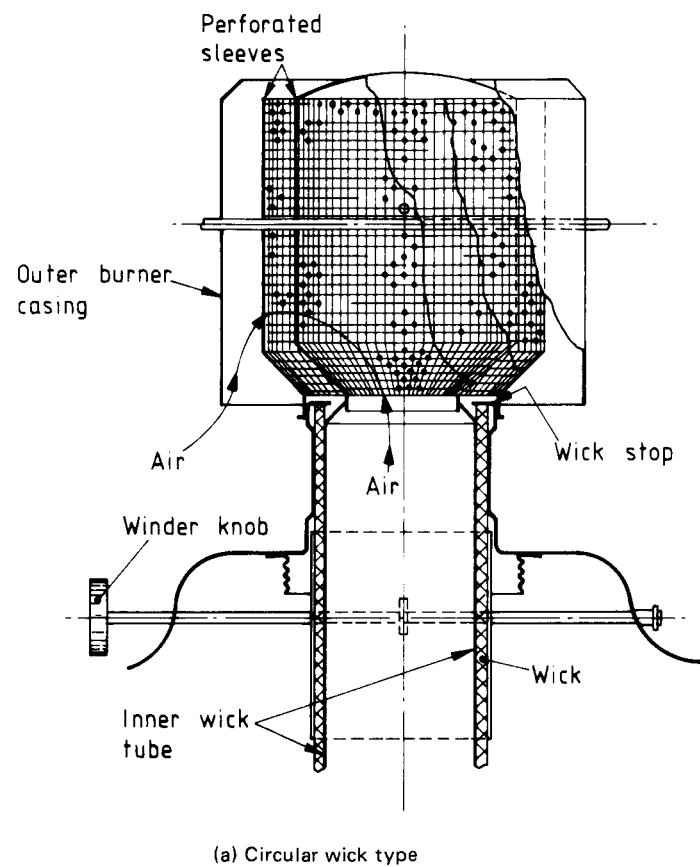


Figure 4 — Short drum burner: wick-fed type

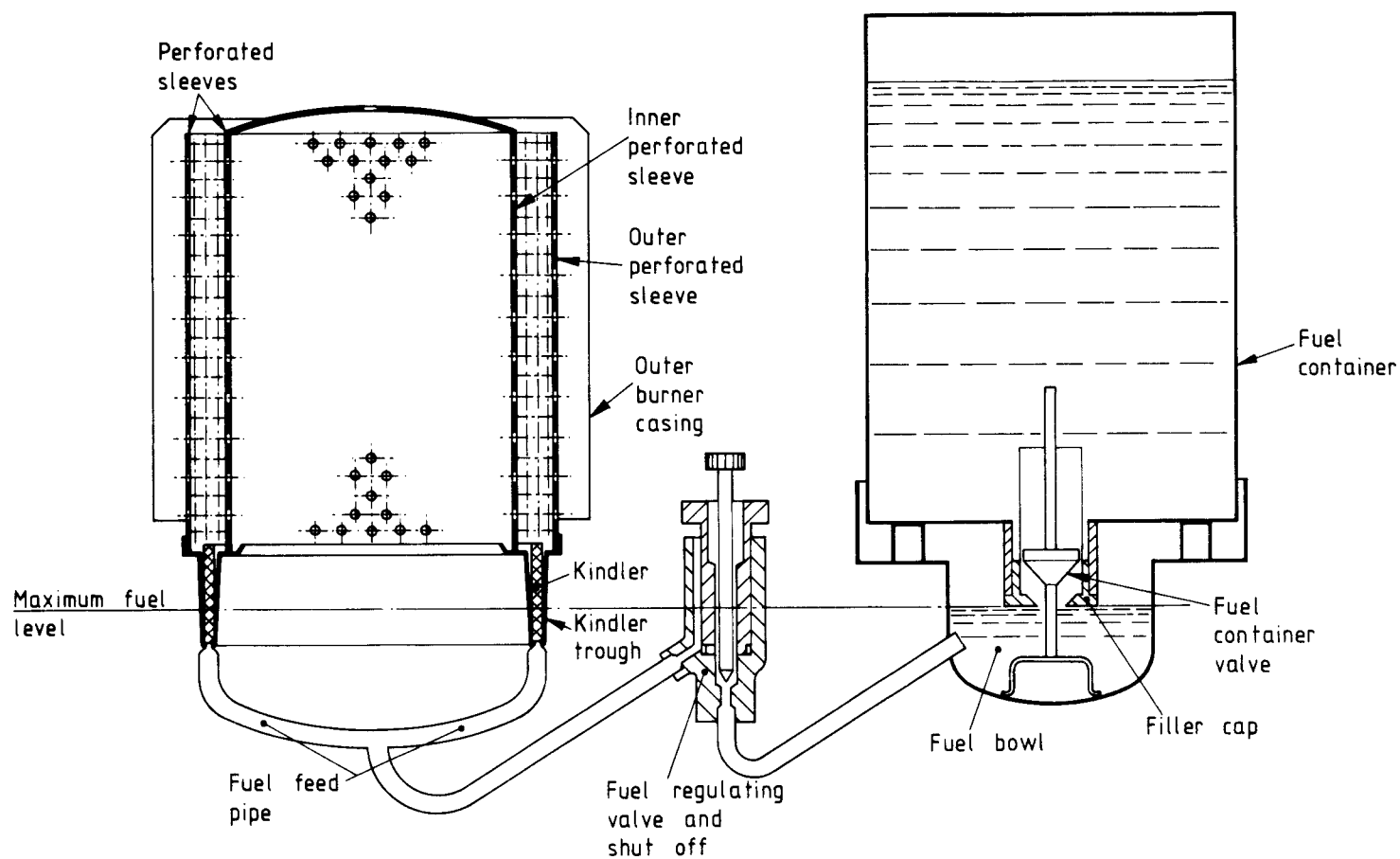


Figure 5 — Short drum burner: kindler type

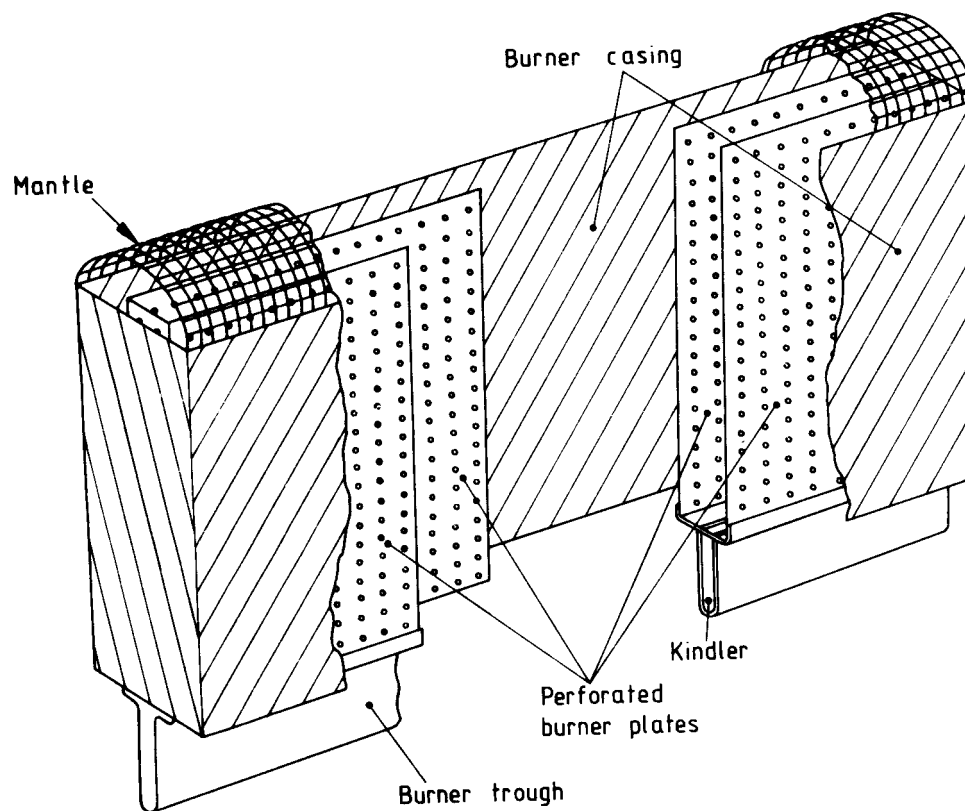


Figure 6 — Short drum burner: plate or rail type