

Code of practice for

Storage and on-site treatment of solid waste from buildings —

(Formerly CP 306-1)

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Association of County Public Health Officers	Institution of Fire Engineers
Institute of Housing Managers	The Scottish Institute of Environmental Health
Institute of Solid Wastes Management	

This British Standard, having been prepared under the direction of the Building Services Standards Committee, was published under the authority of the Executive Board and comes into effect on 30 April 1980

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Contents

	Page
Cooperating organizations	Inside front cover
Foreword	ii
1 Scope	1
2 References	1
3 Definitions	1
4 Initial consultation	1
5 Materials and components	2
6 General principles of the design of facilities	2
7 Systems of waste storage, on-site treatment and collection	3
8 Choice of method of storage and collection of waste in various types of building	3
9 Chute systems	5
10 Waste storage chambers	7
11 Storage for bulky articles	8
12 Storage containers	8
13 Roads and approaches to buildings	8
14 Transportation of containers	8
15 Hygiene	8
Appendix A On-site treatment systems	12
Figure 1 — Section through a typical encased chute installation	10
Figure 2 — Section through a typical free-standing chute installation	11
Table 1 — Commercial waste	4
Table 2 — Output of waste per week	4
Table 3 — Compactors	12
Table 4 — Compactor containers	13
Publications referred to	Inside back cover

Foreword

This standard has been prepared under the direction of the Building Services Standards Committee and supersedes CP 306-1, which is withdrawn.

When CP 306-1 was published in 1972, it was intended to issue further Parts making recommendations for dealing with waste in non-residential buildings, excluding industrial premises. At that time it was hoped that a study of current practice in non-residential buildings would be mounted and that its results would furnish the data for extending the code. Unfortunately this was not possible.

In preparing this revision the opportunity has been taken to add new clauses based upon information that is now available on commercial buildings and to revise the sections dealing with residential buildings. The only types of hospital waste dealt with in this code are those that are similar to household and commercial waste.

It will be noted that the material with which the code is concerned is now designated “waste” rather than “refuse”. This terminology has been adopted so as to agree with that of the Control of Pollution Act 1974.

As a result of experience gained, the requirements of convenience, hygiene, amenity, sound insulation and safety from fire risk, which are accepted as common practice, are incorporated in the methods described in this code.

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 14, 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 gives recommendations for methods of storage and on-site treatment of solid waste from residential and commercial buildings and hospitals, with the exception of medical waste, and lays down recommended practices of collection and good hygiene.

2 References

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

3 Definitions

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

3.1

baler

a device that compresses waste into a mould to form bales, which may be self-supporting or retained in shape by wire ties or strappings

3.2

bulk waste storage container

a movable container for storing waste and having a capacity of between 1 m³ and 30 m³

3.3

chute

a ventilated, essentially vertical pipe passing from floor to floor of a building with openings as required to connect with hoppers, and normally terminating at its lower end at the roof of the waste storage chamber

3.4

communal waste storage container

a movable receptacle, normally situated within the storage chamber, into which the waste is discharged and having a capacity of between 0.75 m³ and 1 m³ (See BS 1136 and BS 3495.)

3.5

compactor

a machine for compressing waste into disposable or reusable containers

3.6

compacted waste container

a strengthened interchangeable container into which controlled waste is packed under compression by means of a compactor and generally designed for handling by a specially equipped vehicle (See BS 5832.)

3.7

hopper

a fitting into which waste is placed and from which it passes into a chute or directly into a waste container. It consists of a fixed frame and hood unit (the frame) and a hinged or pivoted combined door and receiving unit (the door)

3.8

individual waste container

a container having a capacity of not more than 0.12 m³ in which waste is stored awaiting collection, e.g. a dustbin fitted with a loose or captive lid in galvanized steel, metal or plastics; or disposable sack

3.9

shredder

a machine for reducing waste into smaller pieces. The particles may be of any size between 25 mm and 150 mm, depending on the design of the machine

3.10

waste storage chamber

a compartment for one or more waste containers into which waste is discharged. The chamber may also house plant, such as a compactor, for the treatment of waste before collection

4 Initial consultation

At an early stage of design it is essential that agreement be reached between the designers and the appropriate authorities, particularly upon the following points.

- a) The methods of storage, on-site treatment and collection of waste to be used for the form of layout and building density adopted.
- b) The location of waste storage and treatment areas to be provided and means of access to them for waste collection, staff and vehicles.
- c) The storage capacity to be provided with allowance for the frequency of collection, the volume and nature of waste expected and the size and type of containers to be used.
- d) The responsibility for cleansing and maintenance of storage facilities.
- e) Environmental aspects, e.g. air pollution and noise control.
- f) The discharge of waste into sewers.
- g) Means of escape and fire-fighting arrangements in waste storage and collection areas.

5 Materials and components

All installations, materials, components and methods of testing should comply with the relevant British Standards where applicable, including the following:

BS 65 and BS 540, *Clay drain and sewer pipes including surface water pipes and fittings.*

BS 416, *Cast-iron spigot and socket soil, waste and ventilating pipes (sand cast and spun) and fittings.*

BS 556, *Concrete cylindrical pipes and fittings including manholes, inspection chambers and street gullies.*

BS 729, *Hot dip galvanized coatings on iron and steel articles.*

BS 792, *Mild steel dustbins.*

BS 1136, *Mild steel refuse storage containers.*

BS 1449, *Steel plate, sheet and strip.*

BS 1577, *Mild steel refuse or food waste containers.*

BS 1703, *Specification for refuse chutes and hoppers.*

BS 3107, *Small incinerators.*

BS 3316, *Large incinerators for the destruction of hospital waste.*

BS 3495, *Aluminium refuse storage containers.*

BS 3654, *Galvanized steel dustbins for dustless emptying.*

BS 3813, *Incinerators for waste from trade and residential premises — Part 1: Capacities between 50 lb/h and 1 000 lb/h.*

BS 4998 *Moulded plastics dustbins*

BS 5832, *Specification for compacted waste containers for lift-off type vehicles.*

6 General principles of the design of facilities

6.1 General. Facilities for handling waste should provide adequate storage and, where appropriate, space for on-site treatment plant, combined with the maximum convenience for the occupier and waste collector and the highest practical standard of hygiene, amenity, safety from fire risk and smoke and sound insulation. Household waste contains a considerable proportion of salvageable materials and the element in commercial waste can be even higher. Salvageable materials contribute substantially to the quantity of waste and hence the total disposal costs. Salvageable materials are a national resource and their recovery is likely to be a necessity within the coming decades. In any building development now being planned, suitable provision should be made in physical terms for the separation and storage of selected material.

Before consideration is given to storage capacity for salvageable materials, the local authority should be consulted.

To provide adequate storage, it is necessary first to know the volume and nature of the waste that will be produced and the frequency of collection. Statistics on rates of production of waste and the nature of waste are given in **6.2** and **6.3** for household and commercial waste. These values should be used as a guide only and an allowance should be made for non-standard conditions, for instance dwellings with below average occupancy, such as old people's flats and maisonettes.

6.2 Household waste. Current statistics do not support the general view that the mass of waste produced weekly by each dwelling is increasing whereas the bulk density of household waste is decreasing. It is important, however, that design should be based on figures obtained in the area concerned. Over the period 1969 to 1976 there is no discernible trend in the variation in bulk density of household waste. In these circumstances the best estimate of output per dwelling is 12 ± 1.2 kg per week at a bulk density of 133 ± 13.3 kg/m³.

6.3 Commercial waste. There are little data available on the quantity and nature of trade waste. The results of a survey made by the Building Research Establishment during the period 1969 to 1970 are given in Table 1 and Table 2 and may serve as a basis for preliminary estimating. Detailed values required for designing large scale facilities should be sought from comparisons with similar situations in the neighbourhood of the new development and from discussion with the appropriate department of the local authority or contractors.

6.4 Hospital waste. The only types of hospital waste dealt with in this code are those types that are similar to household and commercial waste; other types of hospital waste will be defined in Regulations to be made shortly under provisions in the Control of Pollution Act 1974, and advice on dealing with them will be included in a code of practice to be promulgated jointly by the Department of Health and Social Security and the Department of the Environment. Expert advice should be sought about the amounts produced from different types of hospitals.