

BS EN 840-1:2012

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BSI Standards Publication

Mobile waste and recycling containers

Part 1: Containers with 2 wheels with a capacity up to 400 l for comb lifting devices — Dimensions and design

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National foreword

This British Standard is the UK implementation of EN 840-1:2012. It supersedes BS EN 840-1:2004, which is withdrawn.

BSI, as a member of CEN, is obliged to publish EN 840-1 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval as a European Standard. Two of the major manufacturers of plastic wheeled containers have expressed concern regarding the apparent use of dimensions in the standard which would appear to exclude containers presently on the market in the UK and in use by both public and private sectors. These concerns were addressed at a CEN working group meeting and the UK committee therefore wish to point out the following:

- a) the volume criteria present in Table 1 of the standard should be interpreted separately from the dimensions which appear in Table 2 and Table 3 of the standard, i.e. the two criteria, volumes and dimensions are mutually exclusive; and
- b) products are included in EN 840-1:2012 if they fulfil EN 840-1:2004.

The UK participation in its preparation was entrusted by Technical Committee B/508, Waste Management to Subcommittee B/508/1, Waste containers and associated lifting devices on refuse collection vehicles.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Date	Text affected
30 September 2014	National foreword updated to include additional informative text

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 840-1

December 2012

ICS 13.030.40

Supersedes EN 840-1:2004

English Version

**Mobile waste and recycling containers - Part 1: Containers with
2 wheels with a capacity up to 400 l for comb lifting devices -
Dimensions and design**

Conteneurs roulants à ordures ménagères et recyclables -
Partie 1 : Conteneurs à 2 roues de capacité inférieure ou
égale à 400 l pour lève-conteneurs à peigne - Dimensions
et conception

Fahrbare Abfall- und Wertstoffbehälter - Teil 1: Behälter mit
2 Rädern und einem Nennvolumen bis 400 l für
Kammschüttungen - Maße und Formgebung

This European Standard was approved by CEN on 22 September 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Foreword

This document (EN 840-1:2012) has been prepared by Technical Committee CEN/TC 183 “Waste management”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 840-1:2004.

Technical changes since the latest edition:

- The content was adapted to the current state of the art and revised editorially.
- Figure 3 – The functional dimension 28 for frontal receivers and the dimension 28 were redefined.

This European Standard is one part of the series of standards of EN 840 with the main title *Mobile waste and recycling containers* comprising the following parts:

- *Part 1: Containers with 2 wheels with a capacity up to 400 l for comb lifting devices — Dimensions and design* (the present document);
- *Part 2: Containers with 4 wheels with a capacity up to 1 300 l with flat lid(s), for trunnion and/or comb lifting devices — Dimensions and design*;
- *Part 3: Containers with 4 wheels with a capacity up to 1 300 l with dome lid(s), for trunnion and/or comb lifting devices — Dimensions and design*;
- *Part 4: Containers with 4 wheels with a capacity up to 1 700 l with flat lid(s), for wide trunnion or BG- and/or wide comb lifting devices — Dimensions and design*;
- *Part 5: Performance requirements and test methods*;
- *Part 6: Safety and health requirements*.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies dimensions and design requirements of mobile waste and recycling containers with 2 wheels, with capacity up to 400 l to be used by comb lifting devices.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 840-5, *Mobile waste and recycling containers — Part 5: Performance requirements and test methods*

EN 840-6, *Mobile waste and recycling containers — Part 6: Safety and health requirements*

EN 1501-5, *Refuse collection vehicles — General requirements and safety requirements — Part 5: Lifting devices for refuse collection vehicles*

EN ISO 11469, *Plastics — Generic identification and marking of plastics products (ISO 11469)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Terms for components of mobile waste and recycling containers and lifting devices in three languages are given in Annex A.

3.1

mobile waste and recycling container

appropriately designed container fitted with wheels intended to temporarily store waste

3.2

lifting device

structure which picks-up, tilts and empties containers

3.3

comb lifting device

lifting device in which the picking-up system consists of a row of teeth and a locking system to retain the container during emptying

3.4

volume

total space inside the container when the lid is closed

Note 1 to entry: See Table 1.

3.5

nominal volume

capacity

volume stated by the manufacturer

Note 1 to entry: See Table 1 without tolerances.

Note 2 to entry: The English term "capacity" and the French term "capacité" are translated in the German version by the term "Nennvolumen".

3.6**nominal load**

load mass as given in Clause 6

3.7**total permissible mass**

mass of the container plus the nominal load

3.8**functional and safety dimensions**

essential dimensions which ensure the functionality and interchangeability of the container with the compatible lifting device and which are necessary for the operator's safety and health

4 Volumes

This standard identifies the two classes of containers:

- Class I - small size (nominal volume up to 200 l);
- Class II - large size (nominal volume between 200 l and 400 l).

Within the two above-mentioned classes of containers the volumes shown in Table 1 are identified.

Table 1 — Volumes

Volume in l										
60^{+13}_{-5}	80^{+18}_{-5}	120^{+8}_{-6}	140^{+6}_{-12}	180^{+40}_{-10}	190^{+25}_{-10}	210^{+15}_{-5}	240^{+15}_{-5}	260^{+25}_{-5}	340^{+40}_{-25}	390 ± 20

For methods of measuring capacity, see EN 840-5.

The volumes shown in Table 1 correspond to mobile waste and recycling container's capacities at present used in Europe. Since there are some overlapping capacities due to the tolerances, client and manufacturer shall decide while ordering the capacity chosen.

Nominal volumes different from those referenced in Table 1 can be used by agreement between user and manufacturer. The tolerance of the volumes shall be $\pm 10\%$ maximum measured according to EN 840-5.

5 Dimensions and design

5.1 The design of the containers need not correspond to the drawings given in Figure 1. The functional dimensions given in Tables 2 and 3 shall be respected.

5.2 The container shall be constructed so that when it is unloaded or loaded with a nominal load (see Clause 6), it fits on an approved compatible lifting device. It shall be automatically locked safely into the lifting device during the lifting operation. The frontal receiver shall correspond to one of the options given in Figure 2 (Form A or B).

5.3 The lid(s) shall cover the opening of the container completely. It shall be opened easily by itself during the emptying cycle. It/they shall be made with at least 2 fixing points and have at least one means of opening.

5.4 Each wheel shall be capable of withstanding a static load of 100 kg.