



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

National foreword

This British Standard is the UK implementation of EN 840-1:2020, incorporating corrigendum November 2020. It supersedes BS EN 840-1:2012, which is withdrawn.

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

A list of organizations represented on this committee can be obtained on request to its committee manager.

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

© The British Standards Institution 2020

Published by BSI Standards Limited 2020

ISBN 978 0 539 16290 5

ICS 13.030.40

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 April 2020.

Amendments/corrigenda issued since publication

Date	Text affected
31 December 2020	Implementation of CEN corrigendum November 2020: addition of the labels 'A' and 'B' in Figure 2

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 déchets et de recyclage - 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 7 October 2019.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Volumes	5
5 Dimensions and design	6
6 Nominal mass	6
7 Safety and health requirements	6
8 Testing.....	6
9 Marking.....	6
10 Designation.....	7
Annex A (informative) Nomenclature.....	14
Bibliography.....	18

European foreword

This document (EN 840-1:2020) 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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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

This document supersedes EN 840-1:2012.

The main changes compared to the previous edition are listed below:

- a) Table 2 "Examples of the most frequent assignments of classes and volumes" has been added;
- b) Tables 3 and 4 have been revised and new recommendations were added;
- c) Figure 3 "Functional dimension for frontal receivers" has been updated;
- d) former Annex B "Recommendations for manufacturers of lifting devices" has been deleted;
- e) document has been editorially revised and brought in line with the state of the art.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document 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.

These containers are only approved for the before explicitly mentioned lifting devices.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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:—¹, *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.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

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

¹ Under preparation. Stage at the time of publication: FprEN 1501-5.

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 of 0,4 kg/dm³ x nominal volume

Note 1 to entry: See Clause 6.

3.7

total permissible mass

mass of the container plus the nominal load

3.8

functional and safety dimension

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

Volumes, 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 ± 10 % maximum measured according to EN 840-5. Table 2 includes examples of the most frequent assignments of classes and volumes of the containers.