SLOVENSKI STANDARD
SIST EN 15132:2007

01-april-2007

Ohiģja premiļ nih zabojnikov za odpadke s prostornino do 1700 l ï Izvedbene zahteve in preskusne metode

Container shells for mobile waste containers with a capacity up to 1 700 l - Performance requirements and test methods

Abfallbehälterschränke für fahrbare Abfallsammelbehälter mit einem Nennvolumen bis 1 700 l - Anforderungen an die Ausführung und Prüfverfahren

Abris pour conteneurs roulants à déchets de capacité inférieure ou égale a 1 700 l - Exigences de performance et méthodes d'essai

Ta slovenski standard je istoveten z: **EN 15132:2006**

ICS:

13.030.40	Naprave in oprema za odstranjevanje in obdelavo odpadkov	Installations and equipment for waste disposal and treatment

SIST EN 15132:2007 **en;fr;de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15132

September 2006

ICS 13.030.40

English Version

Container shells for mobile waste containers with a capacity up to 1 700 l - Performance requirements and test methods

Abris pour conteneurs roulants à déchets de capacité inférieure ou égale à 1 700 l - Exigences de performance et méthodes d'essais

Abfallbehälterschränke für fahrbare Abfallsammelbehälter mit einem Nennvolumen bis 1 700 l - Anforderungen an die Ausführung und Prüfverfahren

This European Standard was approved by CEN on 6 August 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 15132:2006: E

Contents Page

Foreword

This document (EN 15132:2006) 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 March 2007, and conflicting national standards shall be withdrawn at the latest by March 2007.

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

1 Scope

This European Standard specifies the requirements for container shells for mobile waste containers with a capacity up to 1 700 l covered by EN 840-1 to EN 840-4.

This European Standard specifies the general performance characteristics of such shells as well as the test methods, and gives recommendations for installation.

2 Normative references

The following referenced documents are indispensable for the application 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 ISO 105-B02, *Textiles - Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, including amendment 1:1998)*

EN ISO 877, *Plastics — Methods of exposure to direct weathering, to weathering using glass-filtered daylight, and to intensified weathering by daylight using Fresnel mirrors (ISO 877:1994)*

EN ISO 4892-2, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2:2006)*

EN ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2006)*

3 Terms and definitions

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

3.1
mobile waste container
appropriately designed container fitted with wheels intended to temporarily store waste

3.2
container shell
equipment used as street furniture for housing mobile waste container

3.3
ground level
level where the user is standing while filling the container shell

3.4
loading height
vertical distance between the base of the container shell and the bottom of the shell's filling aperture(s)

3.5
total height
vertical distance between the ground level and the highest point of the container shell

3.6
clearance
empty area from the container shell walls to the waste container

4 General requirements

Any construction material of the container shell shall allow the conformity of the shell with the tests of this European Standard.

If different construction materials are used, they shall prevent any reciprocal incompatibility (i.e. chemical interaction) that could damage them.

All parts of the container shell with which the user may be in contact shall prevent any risk of injury: obvious aggressivity of external surfaces, sharp edges (edges with a radius more than 1,4 mm are considered as sharp edges), pinching risks etc.

Self locking doors and hatches shall allow the opening from inside.

The interior of the container shell shall not be able to retain wastes or cause obstruction for cleaning and disinfecting. It shall also be designed in order to resist damage from interior impacts due to handling of containers into the container shell.

Installation conditions may require sealing devices.

The bottom edge of the shell's door(s) shall be at least 30 mm above the ground level on which the waste containers are moved.

Loading height shall not exceed 1,70 m.

The container shell shall be designed so that the hatches (if present) shall not remain opened after use.

To locate the waste container in the container shell, a minimum clearance shall be respected between container shell and the dimensions of waste containers to be used as defined in the relevant parts 1 to 4 of EN 840.

For 4-wheeled containers, this clearance shall be minimum 150 mm.

For 2-wheeled containers, the clearance shall be minimum 15 mm. Upper free space shall allow the tilting of the container according to the instructions of the manufacturer.

The clearance shall be considered between the maximum dimensions of used waste containers and the closest wall, face of the container shell, other waste container in case of multiple container shell etc.

5 Tests

5.1 General

Results from the test shall be noted in the test report.

5.2 Stability test

5.2.1 Requirement

The aim of the stability test is to check the resistance of the container shell to resist without tipping over to efforts from the wind or any other action.

By test according to 5.2.2 the container shell shall resist to an effort of 2,5 kN without tipping over. Deformation or beginning of ruptures are not allowed on sealing devices when present or any other part of the container shell.

5.2.2 Procedure

The equipment shall consist of the following:

— a device that allows a pulling effort with a rate of less than 1 kN/s;

— a textile strap of 100 mm wide to transmit the force without causing any marking;

— a flat surface to accommodate the whole base of the container shell.

The container shell shall be placed on the flat surface. If it is the case, the container shell shall be fastened in a way to be representative of the sealing manufacturer's instructions. The pulling effort shall be progressively put into effect up to a predetermined value, at a height of two third of the total height of the container shell. The test shall be carried out on the most penalising face. In any doubt, the test should be carried out in several positions.

5.3 Resistance of the functionality of the door(s)

5.3.1 Requirement

The aim of the test is to check the resistance of the doors during the life of the container shell, as well as premature openings or closings due to wind or violent use.

By test according to 5.3.2 at the end of the two stages, the doors shall remain fully operational.

5.3.2 Procedure

The equipment shall consist of the following:

— a device whereby the door(s) can be opened and closed;

— a device whereby a predetermined effort can be applied on the door(s).

This test shall be carried out in two stages. On the first stage, doors shall be totally opened and closed 1 000 times. On the second stage, an effort of 1 kN shall be applied in the middle of one of the doors once when it is totally opened, and once when it is closed, according to the instructions of the manufacturer.

5.4 Resistance of the hatch(es)

5.4.1 Requirement

The aim of the test is to check the resistance of the hatch(es) when opened and closed.

After the test, carried out according to 5.4.2, the hatch(es) shall remain fully operational.

5.4.2 Procedure

The equipment shall be composed of a device whereby hatch(es) can be opened and closed.

The hatch(es) shall be totally opened and closed 50 000 times.

5.5 Resistance of the roof

5.5.1 Requirement

The aim of the test is to check the resistance of the roof to climatic conditions and other overloads.

After the test, carried out according to 5.5.2, the container shell shall remain fully operational and no permanent deformation or rupture capable of hampering designed use is allowed.

5.5.2 Procedure

The equipment shall be composed of a device whereby a load can be installed on the roof of the container shell.

A load of 100 kg/m² shall be uniformly installed on the roof. The value of the load shall be calculated:

$L = 100 \times S$

where

L is the load in kg;

S is the surface of the roof in m^2.

The minimum duration of the test shall be at least 6 h.

5.6 Resistance to exterior impacts

5.6.1 Requirement

The aim of the test is to check the resistance of the container shell against bumps or shocks caused accidentally or by vandalism.

After the test, carried out according to 5.6.2, no permanent deformation or rupture capable of hampering designed use is allowed.

5.6.2 Procedure

The equipment shall be composed of:

— a test load of 50 kg ± 0,1 kg of 3 mm diameter glass marbles in a bag, 500 mm in length when empty;

— an oscillation arm.

If the container shell has to be fastened in a way to be representative of the manufacturer's sealing instructions, this shall be carried out before the test.

The resistance of the container shell shall be checked by 5 impacts of the test load on the middle of each shell's face, at a height of two third of the total height.

The test load shall be pre-positioned as follows (see Figure 1):

— the test load touches the face of the container shell;

— the vertical distance between the oscillation point and the bottom of the bag is 1 500 mm ± 50 mm.

The impact shall be obtained by pulling the test load to form an angle of 35° ± 1° and let it fall with no initial speed on the faces without doors, and 15° ± 1° on the face(s) equipped with doors.

All observations made during the test shall be noted in the test report.