



SLOVENSKI STANDARD  
SIST EN 13117-1:2001

01-februar-2001

HfUbgdcfHbUYa VUÜjU!`NUvc`j]n`fXY`d`Ugh\_Y`nUj Y \_fUbc`i dcfUvc`j`X]gfh]Vi W]!`  
%`XY.`Gd`cýb]`bUa Yb`i dcfUVY

Transport packaging - Reusable, rigid plastics distribution boxes - Part 1: General purpose application

Transportverpackung - Starre Mehrwegtransport- und Lagerkästen aus Kunststoff - Teil 1: Allgemeine Anwendungen

Emballages de transport - Bacs de distribution en plastique, rigide, réutilisables - Partie 1: Usage général

<https://standards.iteh.ai/catalog/standards/sist/b9296324-ab6a-461c-af98-71415902e7b0/sist-en-13117-1-2001>

Ta slovenski standard je istoveten z: EN 13117-1:2000

**ICS:**

55.160 Zaa[ bÄ \ ae^ Ä|æ ä } ä Cases. Boxes. Crates  
: aa[ ä

SIST EN 13117-1:2001 en

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 13117-1:2001

<https://standards.iteh.ai/catalog/standards/sist/b9296324-ab6a-461c-af98-71415902e7b0/sist-en-13117-1-2001>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN 13117-1

May 2000

ICS 55.160

English version

Transport packaging - Reusable, rigid plastics distribution boxes  
- Part 1: General purpose application

Emballages de transport - Bacs de distribution en plastique,  
rigide, réutilisables - Partie 1: Usage général

Transportverpackung - Starre Mehrwegtransport- und  
Lagerkästen aus Kunststoff - Teil 1: Allgemeine  
Anwendungen

This European Standard was approved by CEN on 22 April 2000.

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.

(standards.iteh.ai)

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/b9296324-ab6a-461c-af98-71415902e7b0/sist-en-13117-1-2001>



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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

## Contents

	Page
Foreword .....	3
Introduction .....	3
1 Scope .....	4
2 Normative References .....	4
3 Terms and definitions .....	4
4 Types of reusable rigid plastics distribution boxes .....	6
5 Dimensions .....	12
6 Safety .....	12
7 Designation .....	12
8 Marking and Labelling .....	13
Bibliography .....	15

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 13117-1:2001

<https://standards.iteh.ai/catalog/standards/sist/b9296324-ab6a-461c-af98-71415902e7b0/sist-en-13117-1-2001>

INTERNATIONAL STANDARD  
 NORME INTERNATIONALE  
 NORMA INTERNAZIONALE  
 INTERNATIONAL STANDARD  
 NORME INTERNATIONALE  
 NORMA INTERNAZIONALE  
 INTERNATIONAL STANDARD  
 NORME INTERNATIONALE  
 NORMA INTERNAZIONALE

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

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 November 2000, and conflicting national standards shall be withdrawn at the latest by November 2000.

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

No existing European standard is superseded by this standard.

This draft standard is part of a series of standards for transport packaging, the other Part of which is as follows:  
– Part 2: General specifications for testing

## Introduction

Standardization of reusable containers, especially for consumer goods, is a basic condition for economically and ecologically suitable goods traffic in Europe. An important subject is the use by any pool organization of reusable container systems which are thereby able to meet the following requirements:

- a) reduction of empty runs;
- b) improvement of transport space utilization;
- c) optimization of transport flows.

The last point will be influenced by legislation in the coming years. The EC Directive on Packaging and Packaging Waste includes the reuse of packaging as part of the strategy to reduce packaging waste. All systems concerning reusable containers therefore should operate within the framework provided by pool organizations because of synergetic effects throughout the transportation chain.

## 1 Scope

This standard specifies the four main types of reusable rigid plastics distribution boxes for application in the fields of handling, transport, storage and display of food and non-food products in distribution systems from the point of manufacture to the point of retail services:

These are:

- a) rigid parallelepipedic and rectangular boxes (stackable boxes)
- b) foldable boxes
- c) nestable boxes
- d) nestable and stackable boxes.

These boxes are based on the modular area 600 mm × 400 mm and subdivisions or multiples of it.

## 2 Normative References

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 13117-2

Transport Packaging – Reusable, rigid plastics distribution boxes – Part 2: General specifications for testing

ISO 3394

Dimensions of rigid rectangular packages – Transport packages

## 3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply:

### 3.1

#### **bottom**

external base of the box.

### 3.2

#### **burr**

sharp sliver of plastics anywhere on a moulding.

### 3.3

#### **capacity**

inner parallelepipedic rectangular volume calculated by multiplying the usable inner length by the usable inner width (both measured at the half way height) and the usable inner height.

### 3.4

#### **ends**

two shortest vertical walls of a box.

### 3.5

#### **flash**

thin skin of surplus plastics resulting from mismatching of moving parts of a mould.

### 3.6

#### **foldable box**

box with a mechanism to reduce its volume when empty, see examples in figures 1 and 2.

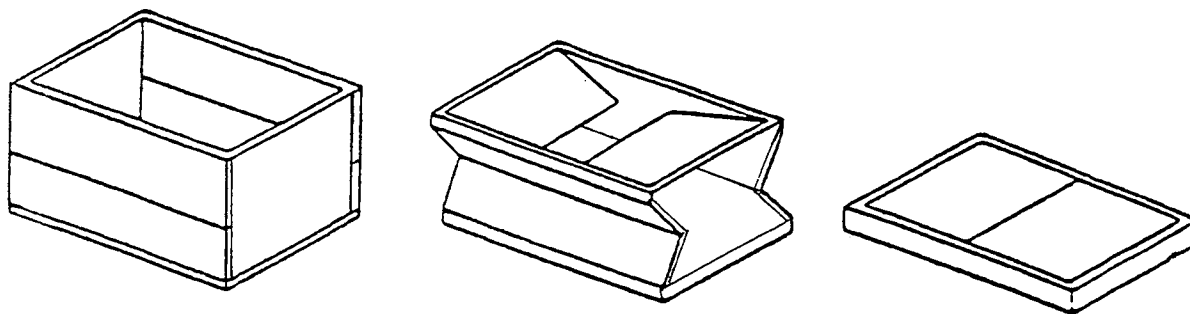


Figure 1 - Folded without plan view dimensions changed



Figure 2 - Folded with plan view dimensions changed

### 3.7 lid

accessory which fits inside or over the top rim of the box.

### 3.8 maximum capacity

water equivalent volume up to the usable inner height.

### 3.9

#### nestable box

box which can be placed upright partly inside another when empty, to reduce volume (see figure 6).

### 3.10

#### nestable and stackable box

nestable box incorporating a method of stacking (see figure 7).

### 3.11

#### nominal load

recommended maximum weight of box contents.

### 3.12

#### nominal stacking load

recommended maximum weight applied to the top of a box when stacked.

### 3.13

#### reusable packaging

packaging which has been designed to accomplish within its life cycle more than one trip or rotation in order to be reused for the same or a comparable purpose.

### 3.14

#### sides

two longest vertical walls of a box.

### 3.15

#### test load

the maximum load required to be contained inside the box, multiplied by the safety factor, or the maximum stacking load required on top of the box, multiplied by the safety factor.

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

SIST EN 13117-1:2001

<https://standards.iteh.ai/catalog/standards/sist/b9296324-ab6a-461c-af98-71415902e7b0/sist-en-13117-1-2001>

**4 Types of reusable rigid plastics distribution boxes**

Details of the four main types of rigid plastics distribution boxes are given in table 1 and figures 3 to 7.

Table 1

Position Number	Description
1	Overall length
2	Overall width
3	Overall height
4	Usable inner height
5	Location height
6	Stacking height
7	Overall length flat
8	Overall width flat
9	Overall height flat
10	Stacking height flat
11	Incremental height when nested
12	Inner bottom length
13	Inner bottom width
14	Inner top length
15	Inner top width
16	Usable inner bottom length
17	Usable inner top length

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

SIST EN 13117-1:2001

<https://standards.iteh.ai/catalog/standards/sist/b9296324-ab6a-461c-af98-71415902e7b0/sist-en-13117-1-2001>



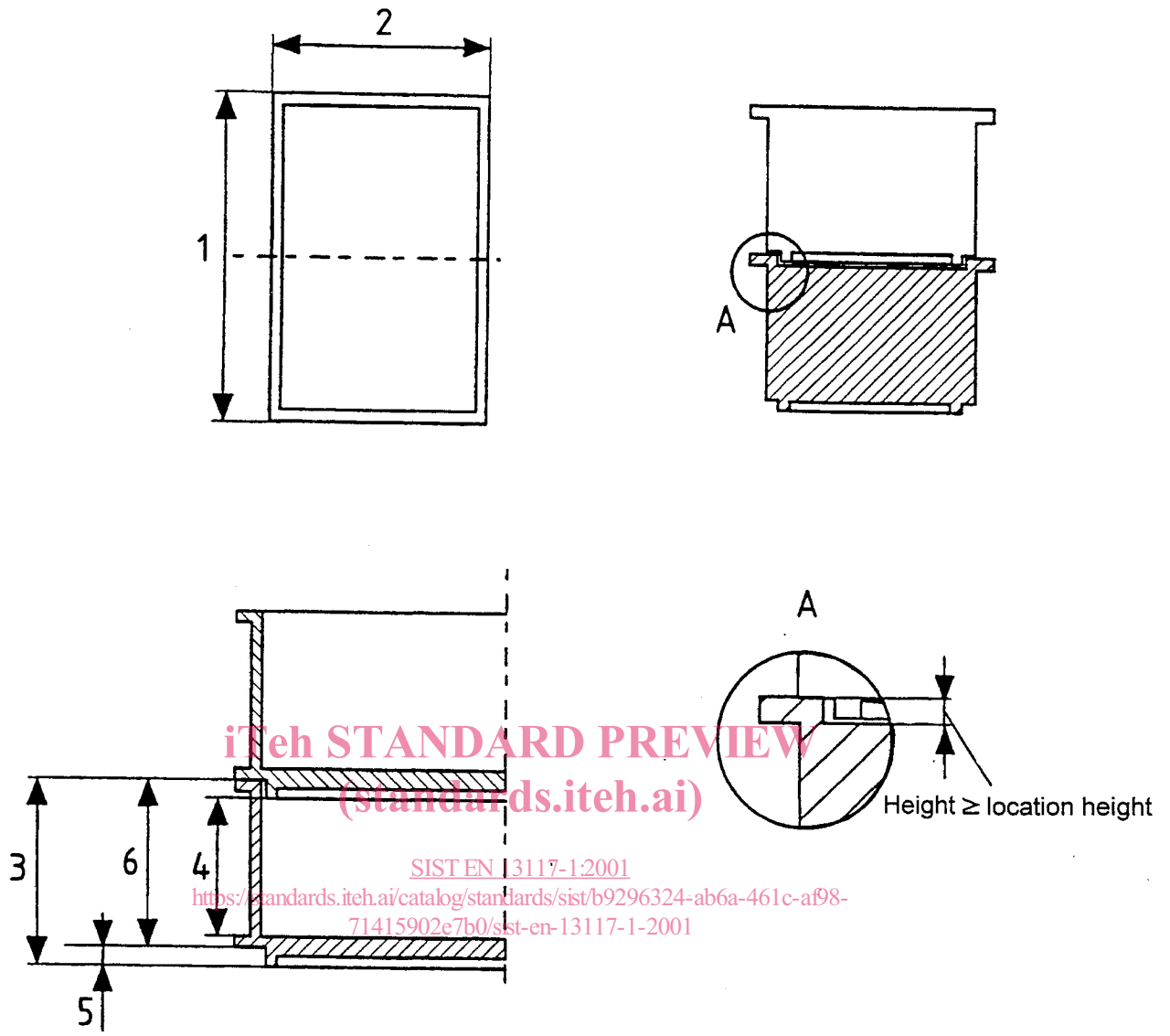


Figure 3 - Rigid parallelepipedic and rectangular box