

Wallcoverings in roll form — Specification for wallcoverings for subsequent decoration

ICS 91.180

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee CW/35, Wallcoverings, upon which the following bodies were represented:

- British Adhesives and Sealants' Association
- British Coatings Federation Limited
- British Plastics Federation
- Builders' Merchants' Federation
- Consumer Policy Committee of BSI
- Cork Industry Federation
- Home Decoration Retailers' Association
- Institute of Trading Standards Administration
- Paper Federation of Great Britain
- Wallcovering Distributors' Association

This British Standard, having been prepared under the direction of the Consumer Products and Services Sector Board, was published under the authority of the Standards Board and comes into effect on 15 May 1997

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The following BSI references relate to the work on this standard:
 Committee reference CW/35
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Amendments issued since publication

Amd. No.	Date	Text affected

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Foreword	2
Text of EN 234 : 1989 incorporating Amendment A1 : 1996	3

National foreword

This British Standard has been prepared by Technical Committee CW/35, and is the English language version of EN 234 : 1989 *Specification for wallcoverings for subsequent decoration*, incorporating Amendment A1 : 1996 published by the European Committee for Standardization (CEN). This new edition supersedes BS 1248 : Part 3 : 1990 which is withdrawn.

Cross-references

Publications referred to	Corresponding British Standards
EN 233	BS EN 233 : 1996 <i>Wallcoverings in roll form — Specification for finished wallpapers, wall vinyls and plastics wallcoverings</i>
EN 235 : 1989	BS 1248 : Part 1 : 1989 <i>Wallcoverings in roll form — Vocabulary and symbols</i>
ISO 186 : 1985	BS 3430 : 1986 <i>Method for sampling to determine the average quality of paper and board</i>
ISO 187 : 1977	BS EN 20187 : 1991 <i>Paper, board and pulps. Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples</i>

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, the EN title page, pages 2 to 8, an inside back cover and a back cover.

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Descriptors: Wallcoverings, characteristics, dimensions, washing, colour fastness, marking, designation, symbols, consumer information

English version

Wallcoverings in roll form — Specification for wallcoverings for subsequent decoration

(includes amendment A1 : 1996)

Revêtements muraux en rouleaux — Spécification pour revêtements muraux pour décoration ultérieure
(inclut l'amendement A1 : 1996)

Wandbekleidungen in Rollen — Festlegungen für Wandbekleidungen für nachträgliche Behandlung
(enthält Änderung A1 : 1996)

This European Standard was accepted by CEN on 15 September 1988; amendment A1 was approved by CEN on 1996-06-14. 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.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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

Brief history

Following a request by the International Wallpaper Manufacturers' Association (IGI), CEN/TC 99 was established in 1980 to develop standards for wallcoverings in roll form. The IGI submitted a first draft proposal. This was considered and developed at CEN/TC 99 meetings in London (1981), Paris (1982), Berlin (1983), Göteborg (1984), Manchester (1985) and Brussels (1988).

This is one of three European Standards for wallcoverings so far developed; the other two being a vocabulary, EN 235, and a standard for finished wallpapers, wall vinyls and plastics wallcoverings, EN 233.

Still in preparation in CEN/TC 99 are standards for textile and for heavy duty wallcoverings.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom

Foreword

This European Standard has been prepared at the request of the International Wallpaper Manufacturers' Association (IGI) and specifies the main requirements that concern the users of these wallcoverings.

Foreword to Amendment A1

This Amendment, EN 234 : 1989/A1 : 1996, to EN 234 : 1989, has been prepared by Technical Committee CEN/TC 99, Wallcoverings, of which the Secretariat is held by BSI.

This Amendment to European Standard EN 234 : 1989 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 1997, and conflicting national standards shall be withdrawn at the latest by February 1997.

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

Contents

	Page
Brief history	2
Foreword	2
0 Introduction	3
1 Object and field of application	3
2 Normative references	3
3 Definitions	3
4 Dimensions	3
5 Spongeability, washability and colour fastness to light	4
6 Matching, application, removal and miscellaneous symbols	4
7 Marking	4
8 Designation	6
9 Environmental requirements	6
Annexes	
A (normative) Sampling for testing	7
B (normative) Method of measuring dimensions	7
C (normative) Designation	7
Table	
1 Symbols for marking purposes	5

0 Introduction

Wallcoverings for subsequent decoration are those wallcoverings intended for decoration after hanging, for example, by the application of paint. They are normally relief or ingrain wallcoverings. These wallcoverings do not, in general, have as good washability and colour fastness to light before their subsequent decoration as have finished wallcoverings which are not intended to be decorated after hanging.

Related European Standards on the vocabulary and symbols used in the wallcovering industry and for finished wallpapers, wall vinyls and plastics wallcoverings are also published.

Other European Standards covering textile wallcoverings and heavy duty wallcoverings are in course of preparation.

1 Object and field of application

This European Standard:

- specifies requirements for dimensions and marking;
- gives the symbols to be used for marking purposes, for matching, methods of application and removal;
- specifies the maximum permissible content of certain heavy metals, vinyl chloride monomer and formaldehyde.

The marking requirements of this standard are primarily for information of the consumer and to enable optimum use to be made of the product.

This standard applies to wallcoverings for subsequent decoration supplied in rolls for hanging onto walls and ceilings by means of an adhesive covering the whole of the interface between the wallcovering and the support.

Excluded from this standard are rigid materials, materials not attached or not wholly attached by adhesive, finished wallpapers, wall vinyls, plastics wallcoverings, textile wallcoverings, heavy duty wallcoverings and non-decorative wallcoverings such as wall linings or those with special properties, e.g. thermal or acoustic insulation.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are placed at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent references 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.

ISO 186 : 1985	<i>Paper and board — Sampling to determine average quality</i>
ISO 187 : 1977	<i>Paper and board — Conditioning of samples</i>
EN 233	<i>Wallcoverings in roll form — Specification for finished wallpapers, wall vinyls and plastics wallcoverings</i>
EN 235	<i>Wallcoverings in roll form — Vocabulary and symbols</i>
prEN 12149	<i>Wallcoverings in roll form — Determination of certain heavy metals contents, vinyl chloride monomer, formaldehyde (In preparation)</i>

3 Definitions

The definitions given in EN 235 apply.

4 Dimensions

4.1 General

The area of the roll shall be not less than 5,326 m² and shall be declared; the permitted deviation from the declared value shall be not more than $\pm 3\%$.

The nominal width and length shall be declared; the permitted deviation from the declared values shall be not more than $\pm 1,5\%$.

4.2 Method of measuring dimensions

Dimensions shall be measured in accordance with annex B.

4.3 Edges

The edges of a roll shall be straight and parallel over its entire length to the following extent:

Straightness	– Over any 1 m length the edges shall not deviate more than 1 mm from the straight
Parallelity	– The three width measurements taken in accordance with B.3a shall not differ by more than 1 mm.

5 Spongeability, washability and colour fastness to light

There are no specific requirements for spongeability, washability or colour fastness to light.

In certain cases the wallcovering may be claimed to have these attributes corresponding to the standard for finished wallcoverings. If such attributes are claimed the wallcoverings shall be tested in accordance with the relevant methods specified in EN 233 and marked as indicated therein.

6 Matching, application, removal and miscellaneous symbols

6.1 The symbols to be used for indicating pattern matching are given in table 1, serials 4.1 to 4.4.

6.2 The symbols to be used for indicating the means of application are given in table 1, serials 5.1 to 5.3.

6.3 The symbols to be used for indicating the method of removal are given in table 1, serials 6.1 to 6.3.

6.4 The symbols to be used for indicating the desirability of overlapping joins and double cutting, and for a duplex embossed wallcovering are given in table 1, serials 7.1 and 7.2 respectively.

7 Marking

7.1 Visible markings

When compliance with this standard is claimed, the roll, outer wrapper or a separate label inside the wrapper of a roll of wallcovering, shall state the special characteristics of the wallcovering in such a way that the following information is readily visible to the purchaser without removing any outer wrapper from an individual roll:

- a) the number of this European Standard, i.e. EN 234*;
- b) name or identification mark of manufacturer, supplier or distributor;
- c) product description, i.e. 'Wallcovering for subsequent decoration', and, where appropriate, terms from EN 235;
- d) identification of product, i.e. pattern number, batch number;
- e) the width, length and area of the roll;
- f) the means of application, using the appropriate symbol(s) from category 5 of table 1.

* Such marking is a claim of compliance to EN 234 but does not imply CEN approval of the product; the accuracy of this claim is therefore solely the responsibility of the person applying the marking.

Table 1. Symbols for marking purposes			
Category and serial number	Description	Symbol	Designation character (see annex C)
4 Pattern matching			
4.1	Free match		
4.2	Straight match	(with, also, the dimensions of design repeat in cm e.g. 50)	
4.3	Offset match	(with, also, the dimensions of design repeat and distance offset, in cm, e.g. 50/25)	
4.4	Reverse alternate lengths		
5 Means of application*			
5.1	Adhesive to be applied to the wallcovering		G
5.2	Adhesive to be applied to the support to be decorated		H
5.3	Prepasted (ready pasted)		K
6 Method of removal			
6.1	Strippable		1
6.2	Peelable		2
6.3	Wet removable		3
7 Miscellaneous			
7.1	Overlap and double cut		
7.2	Duplex embossed		
* Where symbols in this category are required to be used in combination, e.g. 5.1 and 5.2, the necessary symbols shall be given as shown, separated by a + sign of equivalent size to the symbols			

7.2 Additional marking

If necessary, the following information shall be given on the roll, on a label or on an information sheet enclosed with the roll:

- g) additional hanging instructions, e.g. overlap and double cut, using the symbol 7.1 from category 7 of table 1;
- h) type of adhesive to be used;
- j) design repeat and match, using the appropriate symbol from category 4 of table 1;
- k) any suggestion to reverse alternate lengths, using the symbol 4.4 from category 4 of table 1;
- m) the recommended materials for subsequent decoration;
- n) method of removal, using the appropriate symbol from category 6 of table 1;
- p) whether the wallcovering is duplex embossed, using the symbol 7.2 from category 7 of table 1.

7.3 Consistency of marking

The information given in promotional literature, in the pattern book, marked on the pattern slip and marked on cartons shall be consistent with the information given with the roll as defined in 7.1 and 7.2.

8 Designation

If a designation system is used for the wallcoverings covered by this standard, it shall be in accordance with table 1 and annex C.

9 Environmental requirements

9.1 Maximum permissible heavy metal content

The migration of some heavy metals, measured in mg/kg of wallcovering in accordance with test A of prEN 12149, shall not exceed the following values:

Antimony	20
Arsenic	8
Barium	500
Cadmium	25
Chromium	60
Mercury	20
Lead	90
Selenium	165

The limit for antimony does not apply to covering with fire resistance properties accompanied with a rating test report.

9.2 Vinyl chloride monomer content

The vinyl chloride monomer content, measured in mg/kg of wallcovering in accordance with test B of prEN 12149, shall not exceed 0,2.

9.3 Formaldehyde content

The formaldehyde content, measured in mg/kg of wallcovering in accordance with test C of prEN 12149, shall not exceed 120.

Annex A (obligatory annex)

Sampling for testing

Samples for testing shall be taken from wallcoverings, not less than 14 days after manufacture, in accordance with ISO 186¹⁾, except that:

- a) the rolls selected for sampling may be chosen at random; or, if the manufacturer in marking indicates the order of packing from the making, the selection may be made with reference to the order of packing;
- b) the method of cutting sheets shall be modified so that each specimen shall commence at least 1 m from the end of the roll, and shall extend across the whole width of the roll and not less than 500 mm along the length of the roll.

The total area of material taken from each roll shall be at least twice the area of the pieces required for testing to permit repeat tests without resampling.

Annex B (obligatory annex)

Method of measuring dimensions

B.1 Instrument

A suitable steel rule calibrated in millimetres and accurate to $\pm 0,5$ mm.

B.2 Preparation

Measurements shall be made on rolls selected for sampling in accordance with annex A and conditioned in accordance with ISO 187.

B.3 Procedure

a) *Width*

Measure the width perpendicular to the length of the roll at at least three points on the roll which are at least 1 m apart. State the width as the arithmetic mean of these measurements to the nearest millimetre.

b) *Length*

Measure the length on one side of the roll after ensuring that the roll ends are cut at right angles. State the length to the nearest centimetre.

Annex C (obligatory annex)

Designation

C.1 Description

The designation consists of an optional explanatory keyword block and a mandatory identification block consisting of the EN number block and individual item blocks as follows:

WALLCOVERING EN 234 —1) 1) X 2) 2) 2) 3)

NOTES

- 1) Width boxes (2 off):
Insert numerals giving roll width to the nearest centimetre.
- 2) Length boxes (4 off):
Insert numerals giving roll length to the nearest centimetre.
- 3) Application box:
Insert the appropriate letter from table 1.

C.2 Example

A roll of wallcovering for subsequent decoration of width 0,53 m and length 10,05 m, prepasted, is designated:

WALLCOVERING EN 234 —53X1005K

¹⁾ For the purposes of this EN a making is regarded as equivalent to a lot and a roll is a unit. Thus if a consignment consists of more than one making of material, each making is sampled separately.

List of references

See national foreword.

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