

# **Adhesives — Test methods for hydraulic setting floor smoothing and/or levelling compounds — Determination of flow characteristics**

The European Standard EN 12706:1999 has the status of a  
British Standard

ICS 83.180; 91.100.99

## National foreword

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The UK participation in its preparation was entrusted by Technical Committee PRI/52, Adhesives, to Subcommittee PRI/52/-/4, Building adhesives, which has the responsibility to:

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- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 5 and a back cover.

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English version

## Adhesives - Test methods for hydraulic setting floor smoothing and/or levelling compounds - Determination of flow characteristics

Adhésifs - Méthodes d'essai des mortiers de lissage et/ou  
d'égalisation des sols à prise hydraulique - Détermination  
des caractéristiques d'écoulement

Klebstoffe - Prüfverfahren für hydraulisch erhärtende  
Boden-Spachtelmassen - Bestimmung des Fließverhaltens

This European Standard was approved by CEN on 30 September 1999.

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 193, Adhesives, the Secretariat of which is held by AENOR.

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of an identical text or by endorsement, at the latest by May 2000, and conflicting national standards shall be withdrawn at the latest by May 2000.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.

## 1 Scope

This European Standard specifies a test method to assess the flow characteristics of a hydraulic setting floor smoothing and/or levelling compounds.

Hydraulic setting floor smoothing and/or levelling compounds are referred to as "smoothing and/or levelling compound" when mixed with water and/or mixing liquid according to the manufacturers' instructions.

## 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:

prEN 1937:1999, *Test method for hydraulic setting floor smoothing and/or levelling compounds - Standard mixing procedures*

ISO 554, *Standard atmospheres for conditioning and/or testing - Specifications.*

## 3 Terms and definitions

For the purposes of this standard the following definition, together with those given in prEN 1937:1999, apply:

### 3.1

#### **flow**

ability of the mixed floor smoothing and/or levelling compound to spread under its own weight

## 4 Principle

This test method measures the flow properties of a known volume of floor smoothing and/or levelling compound mixture by releasing it from a rigid tube after a given time. The diameter of the spread mixture is measured after a specified time.

## 5 Safety

Persons using this standard shall be familiar with normal laboratory practice.

This standard does not purport to address all safety problems, if any, associated with its use.

It is the responsibility of the user to establish safety and health practices and to ensure compliance with any European and national regulatory conditions.

## 6 Apparatus and material

**6.1 Tubes**, made of smooth, non-corrosive metal, of internal diameter  $(30 \pm 0,1)$  mm and height  $(50 \pm 0,1)$  mm.

**6.2 Glass plate**, clean and dry, dimensions: 300 mm x 300 mm x 6 mm, for example.

**6.3 Timer**, with an accuracy of 1 s.

**6.4 Linear measuring equipment**, with 1 mm divisions.

**6.5 Smoothing and/or levelling compound mixture**, made in accordance with prEN 1937:1999.

## 7 Standard test conditions

All apparatus and materials shall be conditioned at  $(23 \pm 2)$  °C and  $(50 \pm 5)$  % relative humidity in accordance with ISO 554.

## 8 Procedure

Place one tube (6.1) centrally on a glass plate (6.2) and set it on a firm horizontal base. When the standard mixing procedure is completed in accordance with prEN 1937:1999, fill the tube to the top edge with the smoothing and/or levelling compound mixture (6.5). Immediately the tube is filled, start the timer (6.3) and simultaneously lift the tube from the glass plate in a vertical direction to a height of 50 mm to 100 mm within 2 s and allow to drain for 10 s to 15 s.

After not less than 4 min measure the diameter of the flowed mixture in two directions at right angles, using the linear measuring equipment (6.4).

Record the results as a measure of the initial flow.

If more information is required, fill additional tubes with the same mixture, without further mixing, at intervals of 5 minutes from the start of the timer. Lift and measure according to the procedure for the first tube.

Record the results as a measure of flow versus time.

## 9 Evaluation and expression of results

Record the flow of the mixture as the mean value of the two measurements of diameter to the nearest 1 mm, in each test.

## 10 Test report

The test report shall include:

- a) a reference to this European Standard;
- b) identification of the smoothing and/or levelling compound stating the date of manufacture and/or batch number, if known;
- c) the mixing procedure used in accordance with prEN 1937:1999 and amount of water and/or mixing liquid used as percentage of the powder by weight;
- d) the initial flow and the flow versus time in millimetres;
- e) a graphical illustration of flow versus time;
- f) any physical changes or abnormalities observed during the test;
- g) any factors which may have affected the result;
- h) date of test.

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