

Unplasticized polyvinylchloride (PVC-U) profiles for the fabrication of windows and doors — Determination of the resistance to artificial weathering

The European Standard EN 513:1999 has the status of a
British Standard

ICS 83.080.20; 91.060.50

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

National foreword

This British Standard is the English language version of EN 513:1999.

The UK participation in its preparation was entrusted by Technical Committee B/538, Doors, windows, shutters, hardware and curtain walling, to Subcommittee B/538/1, Windows, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

This British Standard forms part of a package of standards on window and doors which will not become fully effective until all standards on the package have been published. The effective date of publication will be agreed within CEN and will be notified.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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, the EN title page, pages 2 to 11 and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

This British Standard, having been prepared under the direction of the Sector Committee for Building and Civil Engineering, was published under the authority of the Standards Committee and comes into effect on 15 December 1999

© BSI 12-1999

ISBN 0 580 35305 2

Amendments issued since publication

Amd. No.	Date	Comments

ICS 83.080.20; 83.140.99

English version

Unplasticized polyvinylchloride (PVC-U) profiles for the fabrication of windows and doors — Determination of the resistance to artificial weathering

Profilés de polychlorure de vinyle non plastifié (PVC-U) pour la fabrication des fenêtres et des portes — Détermination de la résistance au vieillissement artificiel

Profile aus weichmacherfreiem Polyvinylchlorid (PVC-U) zur Herstellung von Fenstern und Türen — Bestimmung der Wetterechtheit und Wetterbeständigkeit durch künstliche Bewitterung

This European Standard was approved by CEN on 7 June 1999.

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 bibliographic references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard was established by CEN 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 CEN Central Secretariat has the same status as the official versions.

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



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

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

© 1999 CEN

All rights of exploitation in any form and by any means reserved
worldwide for CEN national Members.

Ref. No. EN 513:1999 E

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Principle	4
4 Apparatus	4
4.1 Artificial weathering apparatus with a Xenon arc light source.....	4
4.2 Grey scale	5
4.3 Colour change measurement apparatus.....	5
4.4 Charpy impact apparatus	5
5 Test pieces	6
5.1 Number of test pieces	6
5.2 Dimensions of the test pieces.	6
5.3 Preparation of the test pieces	6
6 Conditioning	6
7 Weathering test conditions	7
7.1 General	7
7.2 Test conditions for method 1	7
7.3 Test conditions for method 2.....	7
8 Procedure	8
9 Test Report	9
Annex A (informative) Reasons for the choice of exposure conditions	11
A.1 Scope	11
A.2 Moderate climates	11
A.3 Severe (hot and dry) climates.....	11

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 33, Doors, windows, shutters and building hardware, 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 January 2000, and conflicting national standards shall be withdrawn at the latest by January 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.

The requirements are incorporated in the appropriate Product Standard.

This draft European Standard is based on the results of extensive research and inter-laboratory testing comparing artificial and natural weathering. From the results it was concluded that the requirements for the retention of mechanical properties after long term artificial weathering were best defined using one method, and Charpy impact strength testing was chosen. In addition, the spray cycles for moderate and severe climates have been chosen.

Annex A, which is informative, gives the reasons for the choice of exposure conditions.

This standard reflects the state of the art at the time of publication. Further research may necessitate amendments to this standard.