

Specification for

Extruded cellular unplasticized PVC (PVC-UE) profiles

Committees responsible for this British Standard

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- British Plastics Federation
- British Rubber Manufacturers' Association
- Packaging and Industrial Films Association
- SATRA Footwear Technology Centre

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Foreword

This standard has been prepared under the direction of the Plastics and Rubber Standards Policy Committee of the British Standards Institution from a draft submitted by the British Plastics Federation.

It details the requirements of products according to their fire performance identifying three types of products with respectively class 1, class 2 and class 3 surface spread of flame characteristics and which in the main are used in/or on buildings.

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, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Introduction

Cellular PVC-UE products are primarily used as an alternative to traditional building products in a variety of applications for example: claddings, fascias and decorative finishing trims.

The products are characterized by a high stiffness to weight ratio due to the simultaneous formation during extrusion of a denser outer skin encapsulating a rigid closed cellular core. This relationship between the thickness and density of the outer skin and the density of the closed cellular core can be varied to obtain products with differing performance characteristics. The expansion of the core during extrusion derives from the use of either physical or chemical expanding agents. Limited maintenance is necessary and they are easy to work and install (see Annex A).

1 Scope

This standard describes the requirements of mono and co-extruded cellular PVC-UE profiles for non-structural building applications, where they are subjected to surface temperatures not exceeding 50 °C. Sheet and pipe products are not covered by this standard.

2 References

2.1 Normative references

This British Standard incorporates, by reference, provisions from specific editions of other publications. These normative references are cited at the appropriate points in the text and the publications are listed on the inside back cover. Subsequent amendments to, or revisions of, any of these publications apply to this British Standard only when incorporated in it by updating or revision.

2.2 Informative references

This British Standard refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the inside back cover, but reference should be made to the latest editions.

3 Definitions

For the purposes of this British Standard, the following definitions apply.

3.1

external applications

applications where the products will be exposed directly to climatic conditions

3.2

nominal values

typical property values for the product

3.3

extruded profiles

products, usually of non-uniform cross section, of width less than or equal to 750 mm

4 Composition

The material from which the products are made shall consist of polyvinyl chloride to which has been added minor quantities of those additives and pigments that are needed for the manufacture of the compositions and their subsequent extrusion into products meeting the requirements described in this standard. Experience has shown that products normally need to be white to reach the characteristic performance levels of the applications.

5 Designation

The products shall be designated by the following information presented in the following order.

- The number and date of this British Standard, i.e. BS 7619:1993.
- The type selected from those given in Table 1.

For example a type 3 product shall be classified BS 7619:1993: Type 3.

Table 1 — Product types and fire requirements

Types	Fire requirements	
	Surface spread of flame classification	Test Method
1	Class 1	BS 476-7:1987
2	Class 2	BS 476-7:1987
3	Class 3	BS 476-7:1987

6 Product types

The products shall be classified in three types, according to fire property requirements as given in Table 1.

7 Dimensions and dimensional tolerances

7.1 Measurement of dimensions

Dimensions shall be measured using the appropriate method selected from methods 1A, 1B and 1C of BS 4370-1:1988.

7.2 Permissible deviations for width and thickness of extruded profiles

The permissible deviations for thickness and width shall be in accordance with Table 2.