PAS 1188-3:2014

BSI Standards Publication

Flood protection products – Specification

Part 3: Building skirt and wall sealant systems

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Publishing and copyright information

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Contents

Summary of pages
This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 20, an inside back cover and a back cover.

Foreword

Publishing information

This PAS was sponsored by the Environment Agency. Its development was facilitated by BSI Standards Limited and it was published under licence from The British Standards Institution. It came into effect on 31 July 2014.

Acknowledgement is given to the following organizations that were involved in the development of this PAS as members of the steering group:

- Association of British Certification Bodies (ABCB)
- AXA Insurance
- Department for Environment, Food & Rural Affairs (Defra)
- Environment Agency
- Flood Protection Association
- HR Wallingford
- Jacobs U.K. Limited
- JBA Consulting
- National Flood Forum
- Royal Institution of Chartered Surveyors (RICS)
- The University of Manchester

Acknowledgement is also given to the members of a wider review panel who were consulted in the development of this PAS.

This PAS is not to be regarded as a British Standard. It will be withdrawn upon publication of its content in, or as, a British Standard.

The PAS process enables a specification to be rapidly developed in order to fulfil an immediate need in industry. A PAS can be considered for further development as a British Standard, or constitute part of the UK input into the development of a European or International Standard.

Supersession

This part of PAS 1188 supersedes PAS 1188-3:2009, which is withdrawn.

Relationship with other publications

PAS 1188, *Flood protection products – Specification*, is issued in four parts:

- *Part 1: Building aperture products;*
- *Part 2: Temporary products;*
- *Part 3: Building skirt and wall sealant systems;*
- *Part 4: Demountable products.*

Guidance is available from *Six steps to flood resilience: Guidance for local authorities and professionals* [1] and *Delivering benefits through evidence: Temporary and demountable flood protection guide* [2]. Other publications on flood resistant and resilient construction are, *Preparing for floods: Interim guidance*

for improving the flood resistance of domestic and small business properties [3] and, *Improving the flood performance of new buildings: Flood resilient construction* [4] and other recent relevant publications (see publications [5] to [8]).

Parallel guidance is available for property owners in, *Six steps to property level flood resilience: Guidance for property owners* [9] and, *SMARTeST Work package 2 – Report D2.3: Guidance for code of practice* [10].

Guidance is also available from the National Flood Forum (www.floodforum.org.uk) and Flood Protection Association (www.thefpa.org.uk) websites.

Attention is drawn to the need to consider the prevention of the ingress of flood water into buildings through building fabric (i.e. walls and floors), horizontal pipes, waste water fittings and floor gullies. Anti-flood devices for buildings are covered in BS EN 13564-1.

Information about this document

This is a full revision of PAS 1188-3:2009, and introduces the following principal changes:

- normative and informative references have been updated;
- subclause **4.2**, designation, has been added;
- subclause **4.8**, marking, has been amended and updated with list items c), d), e) and f) moved to Annex C;
- subclause **B.4.2**, has been amended to allow testing up to 1 200 mm above test facility floor level for the static head leakage test;
- Annex C has been updated to include a deployment guide and user manual;
- some editorial amendments have been undertaken.

Product certification and testing. Users of this PAS are advised to consider the desirability of third-party certification of product conformity with this PAS. Users seeking assistance in identifying appropriate conformity assessment bodies or schemes may ask BSI to forward their enquiries to the relevant association.

Assessed capability. Users of this PAS are advised to consider the desirability of quality system assessment and registration against the appropriate standard in the EN ISO 9000 series by an accredited third-party certification body.

Test laboratory accreditation. Users of this PAS are advised to consider the desirability of selecting test laboratories that are accredited to EN ISO/IEC 17065 by a national or international accreditation body.

Use of this document

It has been assumed in the preparation of this PAS that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this PAS are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause **J.1.1**, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex A, the product shall ...'". This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

This publication does not purport to include all necessary considerations and specifications for the production of the relevant products. Users are responsible for their own compliance with all applicable laws, compliance with the industry practice and the correct application of this publication.

Compliance with a PAS cannot confer immunity from legal obligations.

Particular attention is drawn to the following specific regulations and associated documents:

- Statutory Rules of Northern Ireland 1991, Technical Booklet L [11];
- Statutory Rules of Northern Ireland 1994, Technical Booklet E [12];
- Statutory Rules of Northern Ireland 1994, Technical Booklet K [13];
- Statutory Rules of Northern Ireland 1994, Technical Booklet N [14];
- Statutory Rules of Northern Ireland 2000, Technical Booklet R [15];
- The Building Regulations (England and Wales) 1991, Approved Document B [16];
- The Building Regulations (England and Wales) 1991, Approved Document F [17];
- The Building Regulations (England and Wales) 1991, Approved Document H [18];
- The Building Regulations (England and Wales) 1991, Approved Document J [19];
- The Building Regulations (England and Wales) 1991, Approved Document M [20];
- The Building Regulations (England and Wales) 2006, Approved Document C [21];
- The Building Standards (Scotland) Regulations 1990, Technical Standard D [22];
- The Building Standards (Scotland) Regulations 1990, Technical Standard E [23];
- The Building Standards (Scotland) Regulations 1990, Technical Standard F [24];
- The Building Standards (Scotland) Regulations 1990, Technical Standard K [25];
- The Building Standards (Scotland) Regulations 1990, Technical Standard M [26];
- The Building Standards (Scotland) Regulations 1990, Technical Standard Q [27];
- The Disability Discrimination Act 1995 [28];
- The Fire Precautions Act 1971 [29];
- The Gas Safety (Installation and Use) Regulations 1998 [30].

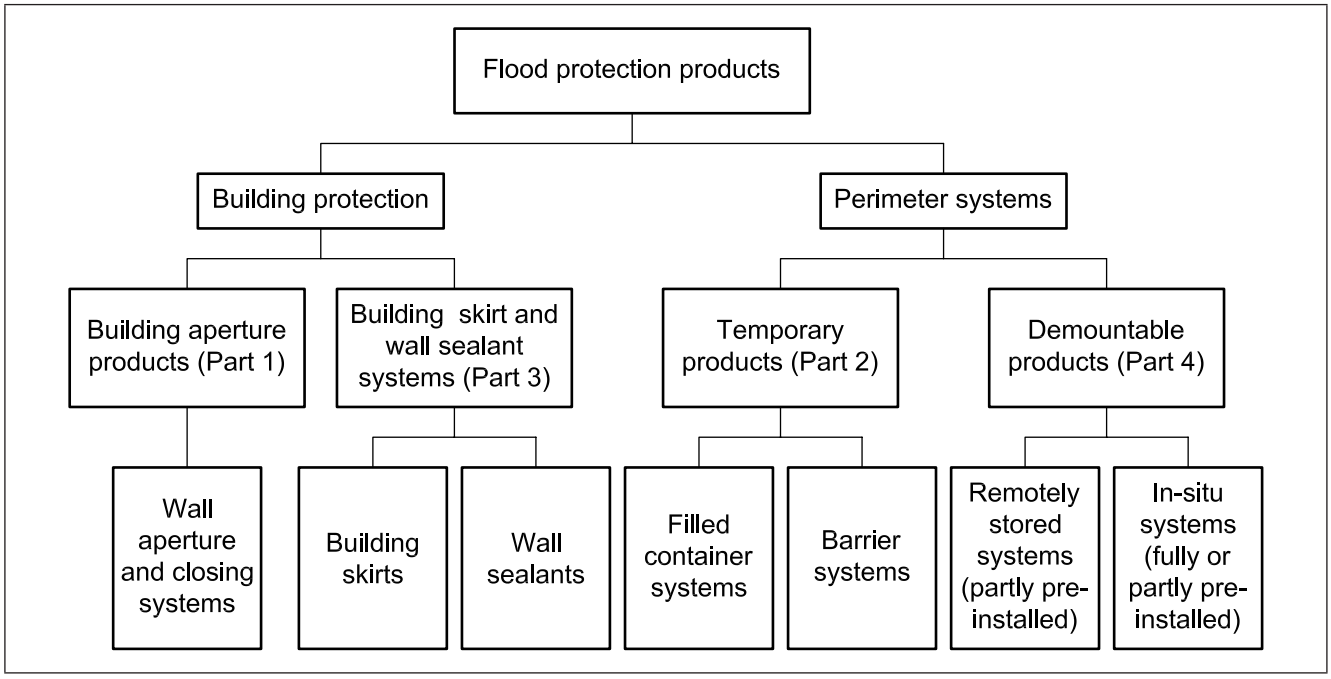
NOTE 1 For rooms containing gas appliances attention is drawn to the Gas Safety (Installation and Use) Regulations 1998 [30] and manufacturers' instructions regarding the free circulation of air both in and out of the building. In such instances special care may be taken with the use of air ventilation bricks.

NOTE 2 It is important that air vent flood protection covers are removed as soon as floodwaters have receded so that sub-floor ventilation is maintained.

0 Introduction

The general classification of flood protection products and relationship between groups of products with each other is shown in Figure 1. Figure 1 also indicates which parts of the PAS 1188 series is relevant for each classification.

Figure 1 **Flood protection products: general classification**



NOTE 1 Attention is also drawn to the need to ensure a safe evacuation of persons in the event of an emergency and to access and egress for persons with impaired movement. This is particularly important for basements where there is a risk that flooding could occur rapidly and to a depth sufficient to be a risk to life. In basement situations consideration may be given to other measures such as water level alarm systems and automatic pumping systems.

NOTE 2 Other risks also need to be considered including gas safety, particularly if bottled gas is being used for temporary heating and cooking, and adequate ventilation of exhaust fumes from equipment such as generators and pumps. Boilers with low level vents are not to be used during flooding if the vent has been covered.

NOTE 3 Maintaining the structural integrity of the building to which the product may be applied to should also be considered in the design of the product designated maximum water depth and its deployment to the building. Attention is drawn to the Construction Design and Management Regulations 2007 *[31] and parts relevant to the roles and responsibilities of designers.*

1 Scope

This PAS specifies requirements for the design, testing, factory production control, installation and user documentation, and marking for different types and configurations of building skirt system and wall sealant system intended for the temporary sealing of the above or below ground external faces of buildings and properties, in the event of flood water rising up to a level between 600 mm and 1 200 mm above ground level.

This PAS is intended for use in the UK or locations with similar exposures, i.e. where there is a temperate climate.

This PAS specifies the method of testing and any allowable leakage rate for above or below ground components.