



BSI Standards Publication

Flood resistance products

Part 2: Perimeter barrier systems – Specification

Publishing and copyright information

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

© The British Standards Institution 2019

Published by BSI Standards Limited 2019

ISBN 978 0 580 99727 3

ICS 91.120.99

The following BSI references relate to the work on this document:

Committee reference CB/501

Draft for comment 19/30372282 DC

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

Contents

	Page
Foreword	ii
Introduction	1
<i>Figure 1 — Flood resistance products: general classification</i>	1
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Requirements	3
4.1 Design	3
4.2 Designation	4
4.3 Designated maximum water depth (DMWD)	4
4.4 Installation and removal of a flood resistance product	4
4.5 Leakage	4
<i>Table 1 — Wave protection categories</i>	5
4.6 Deployment instructions and user manual	5
4.7 Factory production control	5
4.8 Marking	5
Annex A (normative) Method of test for leakage and movement	6
<i>Table A.1 — Wave and current testing depths</i>	9
Annex B (normative) Deployment instructions and user manual	10
Annex C (informative) Definitions of flood resistance product types	13
Annex D (normative) Requirements for factory production control	14
Bibliography	18

Summary of pages

This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 19, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 September 2019. It was prepared by Technical Committee CB/501, *Flood risk and watercourses*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes PAS 1188-2:2014 and PAS 1188-4:2014, which are withdrawn.

Relationship with other publications

Guidance is available from *Delivering benefits through evidence: Temporary and demountable flood protection guide* [1]. Guidance is also available from the National Flood Forum (www.floodforum.org.uk) or the Scottish Flood Forum (www.scottishfloodforum.org).

Information about this document

BS 851188, *Flood resistance products*, is issued in two parts:

- Part 1: *Building products – Specification*; and
- Part 2: *Perimeter barrier systems – Specification*.

Test laboratory accreditation. Users of this British Standard are advised to consider the desirability of selecting test laboratories that are accredited to BS EN ISO/IEC 17025 by a national or international accreditation body.

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Use of this document

It has been assumed in the preparation of this British Standard 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 standard 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.

Where words have alternative spellings, the preferred spelling of The Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

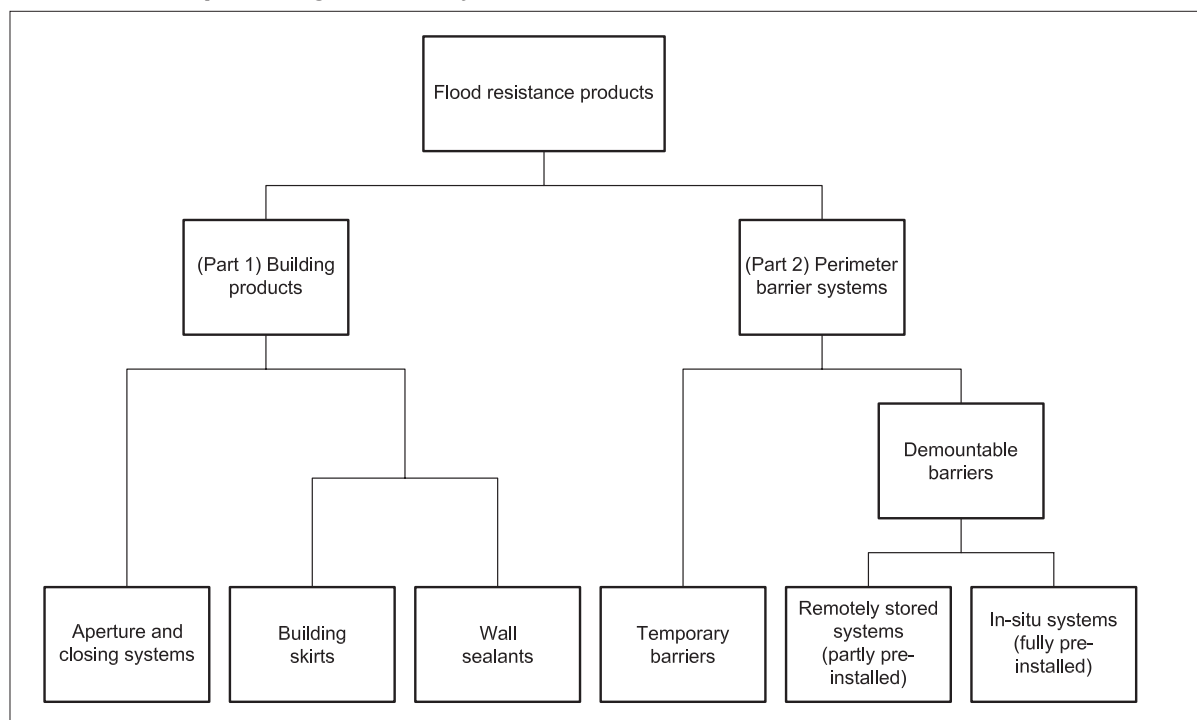
Particular attention is drawn to the following specific regulations and associated documents:

- Statutory Rules of Northern Ireland 2012, Technical Booklet L [\[2\]](#);
- Statutory Rules of Northern Ireland 2012, Technical Booklet E [\[3\]](#);
- Statutory Rules of Northern Ireland 2012, Technical Booklet K [\[4\]](#);
- Statutory Rules of Northern Ireland 2012, Technical Booklet R [\[5\]](#);
- Building Regulations (England and Wales) 2010, Approved Document B [\[6\]](#);
- Building Regulations (England and Wales) 2010, Approved Document C [\[7\]](#);
- Building Regulations (England and Wales) 2010, Approved Document F [\[8\]](#);
- Building Regulations (England and Wales) 2010, Approved Document H [\[9\]](#);
- Building Regulations (England and Wales) 2010, Approved Document J [\[10\]](#);
- Building Regulations (England and Wales) 2010, Approved Document M [\[11\]](#);
- Building Standards (Scotland) Regulations 2004, Technical Handbook 2017: domestic buildings [\[12\]](#);
- Building Standards (Scotland) Regulations 2004, Technical Handbook 2017: non-domestic buildings [\[13\]](#);
- Equality Act 2010 [\[14\]](#);
- Disability Discrimination Act 1995 (Northern Ireland) [\[15\]](#);
- Regulatory Reform (Fire Safety) Order 2005 [\[16\]](#);
- Fire Safety (Scotland) Regulations 2006 [\[17\]](#);
- Fire Safety Regulations (Northern Ireland) 2010 [\[18\]](#);
- Gas Safety (Installation and Use) Regulations 1998 [\[19\]](#); and
- Construction (Design and Management) Regulations 2015 [\[20\]](#).

Introduction

The general classification of flood resistance products and the relationship between groups of products with each other is shown in [Figure 1](#). [Figure 1](#) also indicates which part of the BS 851188 series is relevant for each classification.

Figure 1 — Flood resistance products: general classification



NOTE 1 Attention is drawn to the need to ensure a safe evacuation of persons in the event of an emergency and for access and egress of persons with impaired movement.

NOTE 2 When a designer considers applying a product to a building, the design and the intended method of deployment of the product with its designated maximum water depth (DMWD) should not adversely affect the structural integrity of the building. Attention is drawn to the Construction (Design and Management) Regulations 2015 [\[20\]](#) and parts relevant to the roles and responsibilities of designers.

1 Scope

This British Standard specifies requirements for the designation, testing, factory production control, installation manual, deployment instructions, user manual and marking for different types and configurations of flood resistance products.

This British Standard is applicable to flood resistance products intended for either temporary installation or to be demountable, for use away from buildings but where they could be sealed against structures or buildings at section ends, in the UK or locations with similar exposures, i.e. where there is a temperate climate.

This British Standard specifies the method of testing and an allowable leakage rate.

NOTE 1 The test conditions given in [Annex A](#) represent typical conditions that can be experienced during a flood. This includes testing the flood resistance product on a concrete base for leakage and structural failure under static water levels, random waves up to 0.1 m high and parallel currents up to 1.0 m/s.

NOTE 2 This British Standard does not cover testing with contaminated or saline water; however, product manufacturers are required to provide information about the performance of their products in these conditions (see [Annex B](#)).