

BSI: Your testing and certification partner for excellence.

Testing, certification and installation for flood protection systems.





Introduction

At BSI we have a full range of testing and certification services to enable you to bring your products to market effectively. We are independent of all product suppliers, installers and manufacturers, so we can guarantee a confidential and impartial service, and provide you with reliable objective guidance.

Use BSI to help you independently demonstrate compliance of your new and innovative products or services. Gain BSI Kitemark as your passport to new markets and opportunities.

We have been assessing flood protection products since 2003. We have all the expertise you need to get your product to market and clearly differentiate it in the global marketplace.

In our testing laboratories, we have the people and the processes to launch your product and give it the trusted recognition that will open new markets and opportunities time and again.

Where are you on your journey?

We have a full suite of testing services for you to choose from, to help you get your products to market. Plus if you are developing new products, talking to our experts early in the development process can help you realise the full potential and commercial advantage of certification, with significant efficiencies and increased profits to be gained for your business.

And with our global reach – including partner laboratories in the UK, China, Middle East and Turkey for example, we can support your business locally.

Call: +44 345 0765 606

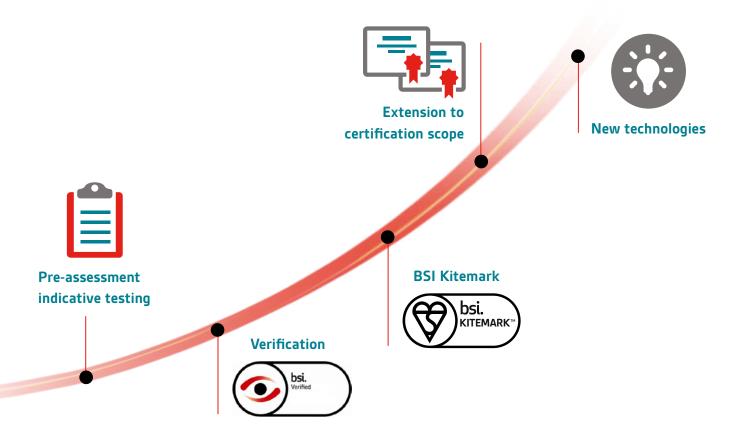
Email: product.certification@bsigroup.com

Visit: bsigroup.com/flood



Your roadmap to certification with BSI.





Our services include:

Pre-assessment/indicative testing



We can help support your product development process to test your innovation as a more cost effective solution before you apply for third-party certification. Any non-conformities

can be identified at an early stage, reducing the need for retesting during a formal compliance test.

Your commercial advantage:

Get your products to market more quickly. Investment at this stage could help you steal a march on your competitors.

Verification



If you have self-declared your products in order to meet specific regulations or directives, you'll have your own test data,

technical files and test reports. Or if no standard exists in the marketplace, you may have your own test data or evidence that your product has been assessed to a certain requirement. If you're looking for additional verification of that data, we can help. We can review all your technical

information, carry out further tests if appropriate and issue a Verification Certificate to you.

Your commercial advantage:

Self-declaration supported by BSI Verification can offer your customers increased levels of confidence in your products. We'll give you the independent overview in specific technical areas, and you'll be able to use verification to support procurement specifications.

BSI Kitemark™



BSI Kitemark has been in existence since 1903. We're proud to own it. It's unique to BSI and has helped to

address safety, quality and security issues for thousands of products and services.

Rigorous testing to national or international standards, ongoing sample testing to avoid any slippage of manufacturing quality or product performance, and annual assessments of factory production controls all combine to give truly robust, independent, voluntary third-party certification with a BSI Kitemark.

If you choose to implement ISO 9001, the international management system for quality to help control your factory production, we can offer you certification against this management system too Visit: bsigroup.com/iso9001

Your commercial advantage:

The BSI Kitemark is a powerful marketing tool which works around the world as a global passport to help you gain access to new markets.



75%

of clients say BSI Kitemark helps them attract new customers



65%

confirm BSI Kitemark helps to increase sales

Plus you can offer your customers additional peace of mind. Direct future clients to your full range of BSI Kitemark approved products, listed in our online Kitemark directory to give additional reassurance.

Visit: bsigroup.com/product-directory

Extending the scope of your certificates



If something has changed which needs to be reflected on your certificate, we can help. From a new location to a new product or modification, we can help you make sure your products still comply, and your certificate is still valid.

New technologies



Where new or adapted products are ahead of the curve, a relevant standard may not yet be available. We can still help. We can often use other specifications or technical documents,

such as trade association specifications or what are known as publically available specifications (PAS's). As long as they are robust, developed by consensus and publically available, we can run a valid certification scheme to them. We are also, where appropriate, able to combine clauses from specific standards in order to be able to offer third-party certification.

Your commercial advantage:

You could be first to market, gaining a significant competitive edge. Combining this with a BSI Kitemark could significantly boost confidence in your products.

BSI Kitemark™

A BSI Kitemark gives a product immediate status – hard earned through rigorous tests at a BSI centre of excellence or our partner laboratories, combined with ongoing auditing and Factory Production Control. We offer a comprehensive range of testing and certification for the key standards for BSI Kitemark including on-site witness testing and integrated multi-assessments.

Our technical teams will organise the testing of your products and manage the full process from end to end.

Clients are welcome to view the testing of their products,

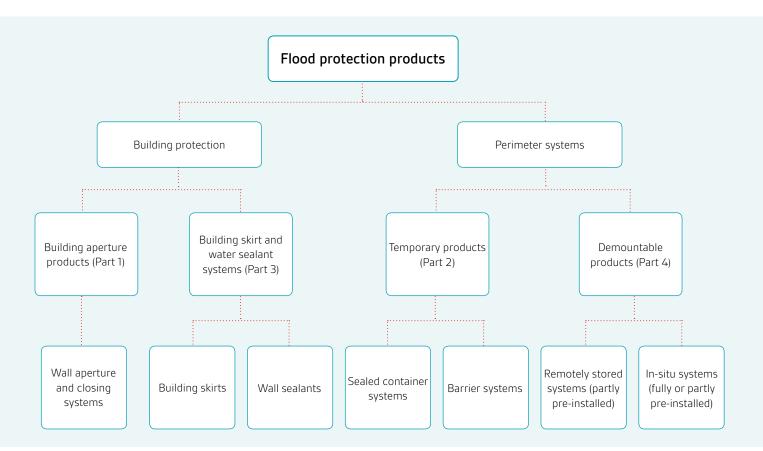
to meet with our technical engineers and experience testing first-hand to share with colleagues and technical teams.

Our Flood protection product testing portfolio

The BSI Kitemark is a registered trade mark owned and operated by BSI. With benefits include risk reduction, increased customer satisfaction and access to new customers around the world.

Originally used solely in the UK, the BSI Kitemark is now recognized throughout the world as a mark of quality and safety which offers true value to consumers, businesses and procurement practices.

Flood protection products are classified into different groups, with their associated standards. We can help you achieve a BSI Kitemark for many of consensus based, industry standards for flood protection products.





PAS 1188-1:2014

Flood protection products - Specification: Part 1: Building aperture products

This PAS is applicable to flood protection products intended for use in the temporary sealing of building apertures and entrances to properties, including boards and flood doors, in the event of static flood water rising up to a level between 540 mm and 840 mm above aperture threshold level. Exceptions are products designed to completely cover or replace small apertures, such as air-bricks or air vents. It covers wall aperture closure systems and foam products.

Building aperture flood protection products are units made up of one or more pieces, with or without a surrounding frame, that form a barrier to the passage of water through an aperture. They are commonly made of materials such as plastic composite, wood, aluminium or steel and range from factory pre-fabricated units to standard plywood sheets cut to size. They can include both re-useable and non reusable products, including foam products.

Examples include:

- Barriers fitted across the aperture
- Flood door, where the closed and lock door acts as a barrier across the aperture
- Air-vent cover
- Building aperture products with automatic operation which are permanently fitted across or adjacent to a building aperture and include components that operate automatically to prevent flooding
- A sealant which when applied to a joint, seals it by adhering to appropriate surfaces within the joint, preventing the passage of water.

PAS 1188-2:2014

Flood protection products — Specification: Part 2: Temporary products

This PAS specifies requirements for the designation, testing, factory production control, installation documentation and marking for different types and configurations of flood protection products intended for temporary installation. It applies to products for use away from buildings but which may 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.

Temporary flood protection products are products that are wholly installed before or during a flood event and removed completely when water levels have receded.

Examples include:

- permeable filled containers
- impermeable filled containers
- air-filled tubes
- water-filled tubes
- free-standing barriers
- frame barriers.

PAS 1188-3:2014

Flood protection products – Specification: Part 3: Building skirt and wall sealant systems

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.

Building skirt systems are a combination of materials and component curtaining a building used to limit or restrict the flow of water entering a building at or above ground level. Individual sections of the skirt are connected with each other by various methods, such as zip fasteners or couplings, to form a continuous, waterproof membrane.

Wall sealant systems are materials that are applied to above or below ground walls or restrict the flow of water entering a building at, above or below ground level. Wall sealant systems are permanently applied non-reusable systems.

PAS 1188-4:2014

Flood protection products – Specification: Part 4: Demountable products

This PAS specifies requirements for the designation, testing, factory production control, installation documentation and marking for different types and configurations of flood protection products intended to be demountable, for use away from buildings, but may 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.

Demountable flood protection products are products that are capable of being dismantled or removed from their settings and reassembled or reinstalled on permanent mountings.

Examples include:

- Free-standing barrier (part pre-installed)
- Frame barrier (part pre-installed)
- Sectional barrier (fully pre-installed)
- Flood gates (fully pre-installed).

BS EN 13564-1:2002

Anti-flooding devices for buildings — Part 1: Requirements

This European Standard specifies types and requirements for materials, performance, design, construction and marking for factory made anti-flooding devices for faecal and/or non-faecal wastewater for use in drainage systems of buildings operating under gravity in accordance with EN 12056-1.

These devices are installed either directly in the pipework of a drainage system, or incorporated in a floor gully intended to protect buildings from internal flooding, i.e. rooms which are below the flood level.

Examples include:

- Type 0: Anti-flooding device for use in horizontal pipes having only an automatic closure device.
- Type 1: Anti-flooding device for use in horizontal pipes having an automatic closure device and an emergency closure device, where this emergency closure device may be combined with the automatic closure device.

- Type 2: Anti-flooding device for use in horizontal pipes having two automatic closure devices and an emergency closure device, where this emergency closure device may be combined with one of the automatic closure devices.
- Type 3: Anti-flooding device for use in horizontal pipes having an automatic closure device actuated by external energy (electrically, pneumatically or other) and an emergency closure being independent of the automatic closure device.
- Type 4: Anti-flooding device incorporated in waste fittings or floor gullies having an automatic closure device and an emergency closure device, where this emergency closure device may be combined with the automatic closure device.
- Type 5: Anti-flooding device incorporated in waste fittings or floor gullies having two automatic closure devices and an emergency closure device, where this emergency closure device is combined with one of the automatic closure devices.

BSI Kitemark[™] for Installation of Flood Protection Products

What is the BSI Kitemark for Installation of Flood Protection Products?

The BSI Kitemark for Installation of Flood Protection Products has been developed to give home owners the assurance that any BSI Kitemark Flood Protection Products have been installed correctly by BSI Kitemark certified installers. It will provide the level of protection the product is designed and tested to achieve.

The BSI Kitemark is a symbol that almost 70% of consumers recognize and represents quality, safety and trust. Any product or service must be rigorously assessed in order to achieve and maintain the BSI Kitemark. It provides an independent third party endorsement that a service consistently meets the requirements of the appropriate standards or scheme



Whilst the BSI Kitemark for Installation of Flood Protection Products cannot guarantee to prevent all flooding, it is an important element in the defence against flooding. It will help determine that the product is fit for purpose, fitted correctly and will protect to the specified flood level. If water exceeds this level however, flooding might occur, for example in the case of overtopping.

What does the scheme include?

The BSI Kitemark for the Installation of Kitemark Flood Protection Products has four main elements:-

- There is a process in place to assess and validate the competency of the installers
- A survey is undertaken of the aperture where the BSI Kitemark product is to be fitted to check for vulnerabilities and ensure its suitable and fit for purpose
- The product will be checked to ensure it is installed in accordance with the manufacturer's instructions
- A practical site test is carried out to demonstrate the effectiveness of the installation.

In addition, installers are required to ensure the home owner has a wider understanding of the flood risk to their property and make them aware of other potential vulnerabilities.

To gain the BSI Kitemark an organization must demonstrate competency to successfully undertake these tasks and comply with the BSI Kitemark scheme requirements. Whilst the skill set and competency of an individual is central to the quality of the service provided by an organization this scheme is a not a competent persons scheme.

A flexible scheme for both individual installation companies and groups

The scheme is available to all installation companies that can demonstrate an appropriate level of competence, normally via training and practical assessment. It has been designed specifically so that both individual organizations and those that operate in conjunction with a trade body or group of companies can benefit from it and the widely recognized BSI Kitemark.

Speak to one of our experts today or visit our website for more information.

Call: +44 (0)345 0765 606
Email: product.certification@bsigroup.com
or visit: bsigroup.com/flood

Transferring your management system certification to BSI

BSI is the business standards company that helps clients make excellence a habit. We do this through a unique range of products and services that ensure you first understand what best practice looks like, how to then achieve it and ultimately embed excellence as an ongoing habit throughout your organization. Our integrity, expertise and the customer experience we provide make the difference that matters most to our clients around the world – improving their business.

5 simple steps to transfer to BSI





2







Get in touch

Telephone or email us for a no-obligation review of your needs:

- · 0345 080 9000
- certification.sales@ bsigroup.com

Share

Send us your application together with:

- A copy of your existing certificate
- Your last visit report

We'll then send you a written quotation for your review.

Review

Once you're happy with our quote, we'll carry out an on-site verification assessment of your current management system.

Transfer

After a successful verification assessment we'll issue your BSI Certificate and Assurance Mark so you can promote your BSI certification to all your stakeholders

Keep improving

We'll continue to assess you in-line with your existing plan, to help you maintain your certification and continue to drive improvements for your business.

Providing excellence...

...in assessment

- Over 250 in-house assessment professionals nationwide, experienced in the full range of industry sectors and management system standards.
- You'll be assessed by the most appropriately experienced professional, perfectly suited to your business.
- No hidden extras. We don't charge travel expenses, so what you see on your quote is what you'll be invoiced.

...in support

- Our support doesn't end with your certificate. You'll find continuing expert advice and guidance on our dedicated "Just4Customers" website www.bsigroup.com/j4c
- We'll keep you informed about the latest industry developments with webinars, bulletins and events.
- Our business improvement software can help you improve performance, manage risk, and drive sustainable growth.

Additional services

We help manufacturers around the globe by supporting claims of compliance for new and innovative products. You can also use our multiple certification solutions to make sure you have the resilience to be able to cope with growth and be prepared for future challenges. Companies choose our services to protect their supply chain, their data and their operations.

Training from BSI experts

We offer one of the widest ranges of standards-related training available from quality management to managing your energy effectively. We don't just train you to meet standards – we help you to understand how to embed them into your organization.

We know what an auditor will look for – so we train you to meet it. We know the thinking behind the standard – so we can convey that to drive and inspire your people.

We have a team of expert tutors working across the world who can transfer the knowledge, skills and tools your people need to embed standards of excellence into your organization. They have vast amounts of training and assessment experience, and work across a wide range of business sectors.

For our full training courses please visit: **bsigroup.com/training**

Certification to Management Systems

With more than 80,000 certified clients and more full-time assessors than any other certification body worldwide, we are one of the largest and most experienced certification bodies. This means you'll get the most out of your assessment and certification with the least disruption and cost to your operations.

To discover certification for our management systems please visit:

bsigroup.com/certification

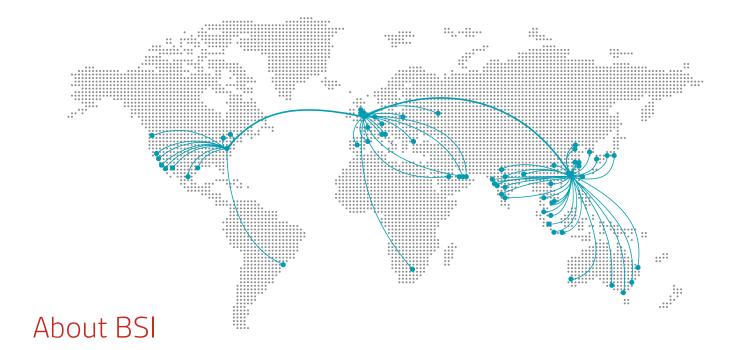
BSI Business Improvement Software

BSI Business Improvement Software can be an effective way to help you get the most from your business processes. It is a powerful tool designed to streamline critical workflows, drive forward continual improvement, and implement newly revised standards.

Here are 3 key things that demonstrate the value of BSI Business Improvement Software and what the return on investment could be:

- Traceability: Our software can increase traceability and improve transparency and rigor to your operations.
 So if there are parts of your business that are not automated, where manual processes such as spreadsheet management are used, or information is not centralized, then there is an opportunity to improve efficiency.
- 2. Visibility: Our software helps to give visibility across an entire organization, to gain control, and ensure deliverables are met. It's also ideal for organizations operating on multiple sites which can be a challenging environment too.
- 3. Process Resilience: Agile organizations with incisive leadership are more resilient and more likely to grow and prosper. Through its reporting tools such as customizable real-time dashboards, BSI Business Improvement Software gives senior management increased visibility on the entire organization. It can help them to spot trends early on and make timely decisions to keep your business one step ahead.

For more information please visit: **bsigroup.com/software-uk**



We are the business standards company that equips businesses with the right tools and solutions to turn best-practice standards into habits of excellence. With over 4,000 staff worldwide, we help our clients drive performance, manage risk and grow sustainably.

Founded in 1901 we were the world's first National Standards Body. Now over a century later, we're globally recognized as a champion in best practice. We have been and still are responsible for originating many of the world's most commonly used standards and publish nearly 2,700 standards every year. These standards are developed to address the most pressing issues of today. They also cover various industry sectors, including Aerospace, Automotive, Built Environment, Food, Healthcare, IT and Fire.

All our standards are underpinned by a collaborative and rigorous approach perfected over decades. We always work closely with industry experts, government bodies, trade associations, businesses of all sizes and consumers to develop standards that drive excellence.

We currently work with over 80,000 clients in 172 countries worldwide to help them adopt and cultivate continuous habits of best practice. We also train our clients and provide them with practical implementation guidance, as well as a comprehensive suite of compliance tools. And to ensure our clients get the very best service, we're also independently assessed and accredited globally by ANAB (ANSI-ASQ National Accreditation Board) and 26 other accreditation bodies throughout the world, including UKAS (United Kingdom Accreditation Service).

Our reach is global and we play a key role within the International Organization for Standardization (ISO). As one of the founding members, we help make sure international standards developed address today and tomorrow's business and social needs, while delivering real benefits to an organization and all its stakeholders.

Speak to one of our experts today or visit our website for more information.

Call: +44 (0)345 0765 606

 $Email: {\color{red} \textbf{product.certification@bsigroup.com}}$

or visit: bsigroup.com/flood



BSI Group Kitemark Court Davy Avenue, Knowlhill Milton Keynes MK5 8PP

T: +44 (0)345 0765 606 F: +44 (0)1908 814920 bsigroup.com Image courtesy of HR Wallingford

The trademarks in this material (for example the BSI logo or the word 'KITEMARK') are registered and unregistered trademarks owned byThe British Standards Institution in UK and certain other countries throughout the world.