

LEADING UK SUPPLIER OF FLOOD DEFENCES FOR UTILITY & INFRASTRUCTURE





UTILITY & INFRASTRUCTURE







lakesidefloodsolutions.co.uk



- ✓ **Quality Guarantee** you can be assured that both the product and services you receive will be of the utmost highest standard
- ✓ Price Promise we can ensure the most competitive rates, no third parties involved
- ✓ All installations are carried out in-house by our highly trained and experienced Lakeside Operatives, and overseen by a Supervisor with 10+ years' experience in the installation of flood defences. In this way, we know that our products will be installed correctly for you
- ✓ Ongoing Maintenance Our in-house installation services also result in the added benefit that any future maintenance checks will also be dealt with both directly and efficiently



OPENING DEFENCE



DOOR DEFENCE



WINDOW DEFENCE



SEWAGE DEFENCE



BRICK DEFENCE



WALL DEFENCE



# WE DELIVER AND INSTALL NATIONWIDE















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# THE LEADING DEMOUNTABLE FLOOD BARRIER SYSTEM

The UK's Leading System, tested to 2.1m H with zero leakage.

The Lakeside Flood Barrier system represents the most robust form of protection available due to its exclusive ground U channel ensuring a continuous watertight seal.

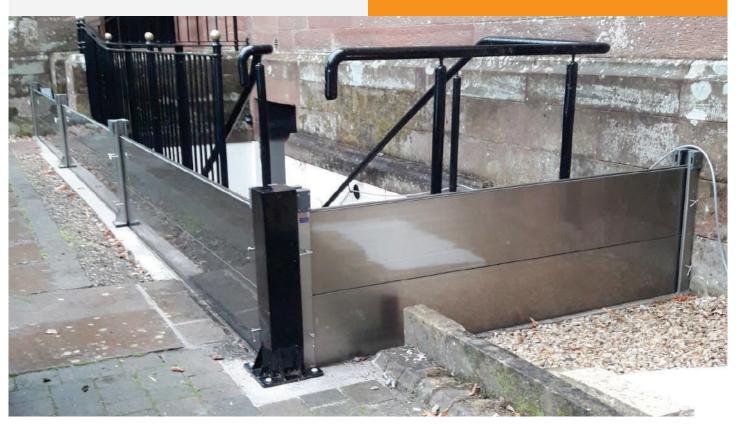
The system is also extremely user-friendly; it can be easily installed within seconds in the event of a flood alert, and then easily removed and stored away when not required.



#### THE LAKESIDE DIFFERENCE

Unique product features, superior to any other flood barrier:

- Robust aluminium yet lightweight; easy to install and store away by one person
- Extremely user-friendly; no tools required for self-installation within seconds
- Discreet ground U channel and bespoke interlocking system ensures continuous watertight seal
- Anodized finish, maintenance-free
- 2 year guarantee
- Ongoing optional annual maintenance check, offered direct with Lakeside
- Tested up to 2.1m high with zero leakage and proven to work in real-life floods



# THE LEADING DEMOUNTABLE FLOOD BARRIER SYSTEM

Our system is extremely versatile to suit a range of openings and sites including:

#### **OPENING TYPE**

#### **Single & Double Doors**

North West Water Treatment Plant





**Bund Walls** 

The Hillsborough College, Sheffield





#### **Pedestrian Walkways**

Dolgellau Flood Risk Management Scheme





#### **Vehicle Openings**

Fremlin Walk Shopping Centre, Kent





#### **Stairwells**

Holme Eden Hall, Carlisle





# SITE / PROJECT TYPE

# **Community Flood Risk Management Schemes**Dolgellau Flood Risk Management Scheme





#### **Coastal / Seafront Schemes**

Public House, Isle of Wight





#### **Protection to Switch Gear / Critical Electricity Supply**

Essex Cricket Ground





#### **Protection to Crucial Utility Assets e.g. Transformer Pens**

Bath Rugby Club





# **FLOOD BARRIER ACCESSORIES**

We offer a wealth of tailored accessories to ensure the most efficient and secure deployment, as well as an aesthetically-pleasing finish.



#### **SIDE POST COVER PLATES**

Covers to completely conceal the flood barrier side posts and all visible fixings. Manufactured from anodized aluminium, the covers can be powder coated to any RAL colour.



#### **POWDER COATING**

Powder coating of all visible fixings - side posts and ground U channel cover plate - to ensure seamless aesthetic fit with your home.



#### STOCK ITEMISATION

Full Stock Itemisation of all flood barriers using a simple colour coded system, to ensure simple and quick self-installation of the system when required.



#### **STORAGE RACKING UNITS**

Wall-mounted storage solutions, available in vertical or horizontal format.

# **GLASS FLOOD WALLS**

A unique flood defence solution providing an optimal, robust level of flood protection coupled with seamless aesthetics.



Our Glass Flood Walls are designed as a permanent feature, thus providing continuous flood protection and requiring no operation. However, the modular nature of the system allows for individual glass panels to be removed or replaced if required, whilst not having to demount or replace the entire span.

The system is designed to ensure the utmost respect for maintenance of aesthetics and visual outlook of the site yet does not compromise on function to ensure a watertight seal. As a result, the system is most commonly used for community, river and coastal locations.

#### THE LAKESIDE DIFFERENCE

- Robust Anodised Aluminium or Stainless Steel 316 to suit even the most aggressive marine environments
- Ultra-strength structural glass
- Unique interlocking seal mechanism
- Engineered frame section designed to withstand the required static and impact loads of the site
- **Modular system** no width or height limitation
- Seamless visual fit with the existing aesthetics and site outlook
- Permanent feature; no manual operation required

# **FLOOD GATES**

An effective, rapid-deployment solution.



Flood Gates are easy to maintain and can be easily operated by one person for quick deployment.

# Flood gates are available with the following design and function options:

- ✓ Single or double leaf
- ✓ 90 or 180 degree opening span
- ✓ Manual or automatic operation
- ✓ Optional sliding function
- ✓ Optional lift-hinge function



#### THE LAKESIDE DIFFERENCE

- **Robust Stainless Steel,** S.S. 304 or S. S. 316 for marine applications
- **Epoxy paint finish** (any RAL or BS colour)
- **Garnet blast Stainless Steel** for marine applications
- Closed cell expanded neoprene profile with solid neoprene skin as continuous seal along vertical and horizontal edges for water tight seal
- **Viton seal option** for petro chemical applications
- Custom fabricated hinges
- Tested with zero leakage



# **STEEL FIRE & FLOOD DOORS**

An extremely robust, passive flood defence solution for single and double doors.



Steel Fire & Flood Doors ensure robust protection against both flood and fire risk. The flood doors are designed and manufactured to the highest specification with unique seal mechanisms and hardware, resulting in flood protection to full door height.

Both single and double flood doors are available, with a range of optional access and security features as required.

Steel Fire & Flood Doors are suitable for a broad range of applications including Warehouses, Store rooms, Electrical Sub Stations, and Retail Outlets.

#### THE LAKESIDE DIFFERENCE

- 5mm thick Galvanised Steel, Grade S275 or Stainless Steel Grade 316L for marine applications
- Closed cell expanded neoprene seal around full perimeter
- **High security multi-point locking system,** with internal emergency panic bar or lever
- Full length stainless steel hinge profile
- Vapour Degrease, Immersion Zinc Phosphate and Polyester Powder Coat, passing 500 hours salt spray test.
   Powder coating with desired RAL colour
- Blast Rating Category 1
- Fire Rating BS EN 1634-1:2000: successfully sustained 264 minutes of flaming
- Safety threshold design preventing the need for a step to form the seal; allows easy vehicular access for larger gates and trip free access for pedestrians
- **Tested with zero leakage** to 2.4m H over 4 weeks continuous testing.



# **uPVC FLOOD DOORS**

A popular passive flood defence solution for single and double doors.

Lakeside uPVC Flood Doors are tested to protect against flood water up to 600mm high, therefore representing a passive flood defence solution for properties subject to lower levels of flooding.

With a wide range of styles and finishes, including an optional wood grain finish, the doors offer flood protection whilst maintaining the existing aesthetics of your property.





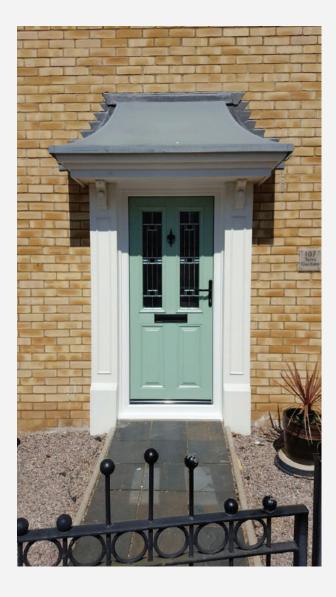
#### THE LAKESIDE DIFFERENCE

- High security locking
- Unique seals and hardware
- Tested to BSI PAS 1188-1

Passive flood defence with the added benefit of thermal efficiency.

A composite flood door provides the added benefit of superb thermal efficiency, independently tested to be superior to traditional timber doors and timber core composite doors.

As per our uPVC doors, Composite flood doors are also manufactured bespoke to order, with a wide range of styles and finishes to suit your property, and protect against flood water up to 600mm high.





#### THE LAKESIDE DIFFERENCE

- 70mm double rebate
- Rigid polymer sub frame
- High density insulate core
- High impact resistant GRP skins
- Laminated, triple glazed glass
- Bespoke gasket arrangement
- Unique seals and hardware
- High security locking

# **FLOOD WINDOWS**

A passive flood defence measure to protect windows from water ingress.



#### **FLOOD WINDOWS**

Our bespoke Slimline Aluminium Flood Windows provide a robust, passive flood defence solution for the premises.



#### THE LAKESIDE DIFFERENCE

- Slimline Frame, powder coated
- Single glazed window
- Fixed or outward-opening





# **FLOOD CABINETS**

Waterproof Flood Cabinets can simply be retro-fitted over existing metre boxes to provide a passive flood protection solution.





Waterproof Flood Cabinets can simply be retrofitted over the existing metre box to ensure a passive, 'automatic' flood protection solution.

#### THE LAKESIDE DIFFERENCE

- Galvanised steel, 1.2mm / 1.5mm thick (size dependent) as standard material
- Single layer metal plate structure
- Inner plates optional
- One or two doors
- Manufactured to any bespoke size
- International test certification: Rosh, IOS9001, CE, IP65
- Standard RAL: 7035 (powder coating available)

# **SEWAGE DEFENCE**

A range of automatic and manual measures to prevent backflow of sewage and rising water both inside and outside a property.

# SUBMERSIBLE SUMP & PUMP SYSTEMS

A crucial flood defence solution for properties subject to flood water rising below ground.



The submersible pump system is installed below ground to a bespoke sump. The pump has an integrated float switch which enables it to automatically switch itself on in the event of rising water, pumping water out and away from the premises.

#### **Unique product features:**

- Automatic activation with float switch
- High output of 292 litres per minute
- Suitable for dirty water; takes solids up to 35mm
- Robust, double Stainless Steel housing

#### **SURFACE WATER PUMPS**

A quick and easy measure to pump water away at ground level.

Often referred to as "Puddle Suckers", surface water pumps are positioned outside on the ground surface during rising water to drain water away from the premises.

# Various pump options to suit your requirement:

- Automatic or manual operation
- Pump water down to as low as 1mm
- Outputs of up to 217 litres per minute
- Compact design available with built-in, adjustable float switch
- 10m power cable and 10m lay-flat discharge hose included with each pump

#### **NON-RETURN VALVES**

A simple solution to prevent backflow of sewage into a property.





Different sizes available to protect both larger and smaller waste outlets.

### **BRICK DEFENCE**

A range of automatic and manual measures to prevent water ingress through air bricks and vent openings.



#### **ANTI-FLOOD AIR BRICKS**

The Anti-flood airbrick is an 'automatic' flood protection solution.

It acts as a standard airbrick allowing unrestricted airflow underneath the premises, yet under flood conditions it uses the rising water to automatically shut off, inhibiting water ingress through the airbricks and therefore flooding underneath the premises.



#### **Unique product features:**

- Automatic device
- Permanently fitted
- Floating valves to prevent water passing back through the airbrick
- No mesh to restrict airflow which could cause damp and dry rot
- Proven to work in real floods and over 350 hours of independent tests
- Hand-made / Individually tested
- Innovative patented design
- Full back-up replacement parts available
- High performance, high tear strength seal

#### **VENT COVERS**

A rapid deployment flood defence solution for existing air vents.

The vent cover only takes a few minutes to install, and effectively offers flood protection to low lying vents.

- Easy and quick to deploy
- Available in Stainless Steel or Aluminium
- Waterproof rubber ensures robust seal
- Manufactured bespoke to any size



# **WALL DEFENCE**

A range of passive flood defence measures to prevent water seepage through walls.



#### **WALL SEALANT**

Application of a transparent sealant to prevent water seepage through walls.

#### **Unique product features:**

- 100% breathable
- Lasts up to 10 years
- Reduces thermal loss by up to 30%
- Reduced condensation & black mould
- Transparent, no surface colour impact

#### **DUCT SEALING**

The Lakeside Duct Sealing Kit seals existing cable ducts and entry points into a building.

#### **TANKING POLYMER**

To mitigate water seepage, ground moisture and dampness.

#### **RE-POINTING**

Re-pointing of walls with water-resistant mortar.

#### RENDERING

Rendering of external walls above flood threshold level.



# **TEMPORARY FLOOD BARRIERS**

Lightweight, rapidly deployable temporary flood barriers for an emergency response.

#### **Concertina Flood Barrier**

Large, collapsible, concertina, multi-cellular unit capable of retaining water up to 900mm H.



#### **Unique product features:**

- No permanent fixings
- Freestanding, self-supporting and stable system
- Lightweight yet robust
- Rapidly deployable by two people
- Extremely adaptable, enabling arching & bending
- Recyclable
- Suitable for a range of terrains
- Suitable for filling with earth, sand, gravel, crushed rock and other granular materials
- Tested to full protocol at US Army Corps of Engineers, Engineer R&D Centre

#### **Modular Flood Barrier**

Impermeable, re-useable, rapidly deployable temporary barrier.



#### **Unique product features:**

- Swift & easily deployable over 100m can be erected by 3 people in under an hour
- Watertight seal on any surface
- Compact storage containers are 'nestable' on top of each other
- Cost-effective yet highly robust
- Vandalism proof
- Re-usable
- Zero maintenance
- Awarded the Innovation Prize from Royal Netherlands Army Regiment of Engineers

#### Water-filled Dam Barrier

Fast, strong and stable re-usable waterfilled dam barrier.



- Designed for extreme weather and stability
- Extremely stable withstands waves as well as static water
- No sandbags or sealant required
- No pumps required to fill system, relies solely on rising water
- Rapid deployment speed just roll out
- 2 Year Manufacturer's Warranty
- Tested at the wave test facility in DHI Water & Environment, Denmark



# **National Bio Sample Centre**

Oxford, October 2016

#### **BACKGROUND**

Given the highly sensitive nature of works carried out in the centre, it was essential that the client found a credible and well-established supplier with a robust product solution.

Lakeside were selected due to their established 29 years' experience and reputation, and the exclusive demountable flood barrier system offered as the optimal solution for all doorway openings.



- Bespoke 'U-Shape' Perimeter Barrier System to Front Fire Exit - composed of 2 x permanent anodized aluminium box sections and 1 x demountable flood barrier to the front, ensuring the quickest possible deployment time of the system when required
- Bespoke Flood Defence Vent Cover





A National Resource to Support biomedica and clinical research In association with:



One of the world's leading universities









# **TESTIMONIAL**

"I'd like to thank all the members of Lakeside staff who worked on this project. We are impressed with the design of the flood defence system and how quick and easy it is to fit and remove".

**Mr Tarquin Davies** 

Facilities Manager-NIHR BC. UK Biocentre



# Lakeside selected by SKANSKA to mitigate the flood risk at Bryn Cowlyd Water Treatment Works

Conwy, North Wales. April 2018

#### **BACKGROUND**

A key challenge to the Arcadis design team related to the site's location, situated on a tidally influenced flood plains of two adjacent rivers.

As a result, it was imperative that the site was fully secured and protected from flooding, while remaining fully operational during extreme flood events.



Lakeside were selected by Skanska to survey, design, manufacture and install the most optimal flood defences for the site.

Lakeside Steel Fire & Flood Doors were installed to 6no. Access Openings on Site, resulting in the highest level of flood protection to the full door height.

The Lakeside Barrier was installed to all 5no. further openings, comprising Roller Shutters, Bi-Fold Doors and Vehicle Entrance Openings.

Client:

**SKANSKA** 











# **Lake Wardens Office on Lake Windermere**

Lake District National Park. January 2018

#### **BACKGROUND**

The Lake Wardens office on Ferry Nab marina, required flood defences following Storm Desmond.

A versatile product solution was required given the high risk of flooding to the site due to its location on the banks of the Lake.





#### **SOLUTION**

Lakeside were selected by Lambert Smith Hampton, on behalf of South Lakeland District Council to install the required flood defences.

The Lakeside Barrier was installed to all 9no. openings due to its extremely quick deployment ability and its watertight nature due to the bespoke ground U channel.

**Client:** 

Lambert Smith Hampton In association with:









#### **TESTIMONIAL**

Lakeside flood Solutions provided an excellent service from initial survey to completed installation and we are very pleased with the quality of the both the products and workmanship".

PAUL SCULLION BSc (Hons) MCIOB NEBOSH
Building Surveyor - Building Consultancy
Lambert Smith Hampton

#### We are proud to serve a Prestigious Client Base:









anglianwater







TATA STEEL



















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