



# FLOOD DEFENCE

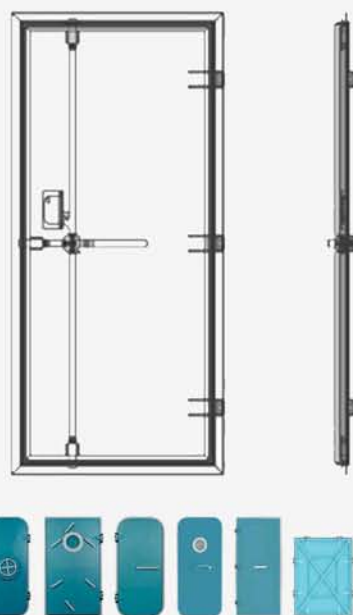
**If your property is at risk of flooding, a lack of flood protection could cost you substantial time and money**

Very few have taken the necessary precautions to protect their property against flood damage when simply planning ahead can dramatically reduce the impact of flooding within your property.

At Westmoor engineering we specialise in watertight, weathertight and gastight solutions for use in marine, offshore and civil industries. We are ideally suited to companies who need to invest in long-lasting, substantial flood defence doors and flood gates.

We develop the correct solutions with customers through our bespoke flood defence door range and design service suited to those with specific individual requirements.

Our experienced design team will work with you throughout the process and is able to rapidly generate concept designs and develop a suitable flood defence solution that will protect your people, assets and property from flood damage.



**WATERTIGHT**

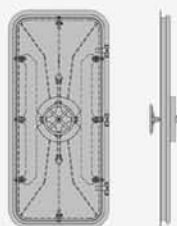
**At Westmoor Engineering we provide solutions through our value-added capabilities.**



**Flood Defence Door Range**



**Flood Gates**



**Bespoke Design**



Westmoor Engineering joins Pensher Skytech and Sound Dead Steel in the Physical Asset Protection Division of the Renown Group.

**ENGINEERING**

# Flood Defence Door Range

## SERIES 1000 UTILITY DOORS



## SERIES 350A WATERTIGHT/WEATHERTIGHT DOORS



## SERIES 100 WATERTIGHT DOORS



## SERIES 200 WEATHERTIGHT DOORS



## SERIES 300 WEATHERTIGHT DOORS



### SERIES 1000 - UTILITY

Our Series 1000 door is a lightweight, low cost solution for protection against the elements. It is designed and manufactured by Westmoor, the unique yet simple design allows it to be adaptable to offer a varying level of protection.

The seal and locking arrangement can be customised to provide anything from a weathertight seal to a full watertight seal able to withstand a head of water.

### SERIES 350A - WATERTIGHT/WEATHERTIGHT

The Series 350a is designed to be very lightweight, aesthetically pleasing and yet incorporates a watertight door and a weathertight door solution within one product.

Using a new method of manufacture and construction, the door is very effective under high pressures, yet is simple, lightweight and cost effective.

### SERIES 100 - WATERTIGHT

The Series 100 provides a watertight access solution for marine, offshore and civil industries, or any environment requiring a watertight door design.

Our Series 100 watertight door provides watertight integrity against a head of water pressure applied from either side. The quick acting turning of the hand wheel, combined with a fully adjustable clamping mechanism ensures our watertight access door will seal with minimum effort.

### SERIES 200/300 - WEATHERTIGHT

Our weathertight doors are designed and manufactured by Westmoor to provide weather tight protection for environments requiring marine access solutions.

The range of weathertight doors offer a simple and effective means of providing weathertight protection to any exposed entrance or compartment. Applications for our weathertight door range include: ships, marine structures, containers, offshore structures (including offshore wind) and renewable energy projects.

### MADE TO SUIT YOUR REQUIREMENTS

All of our Westmoor doors are made to order to suit your exact requirements. They are available in a range of materials, finishes and locking options and are ready for welding or bolting directly to your structure or alternatively can be supplied with welded ties to facilitate casting into concrete structures.



## Flood Defence Gates

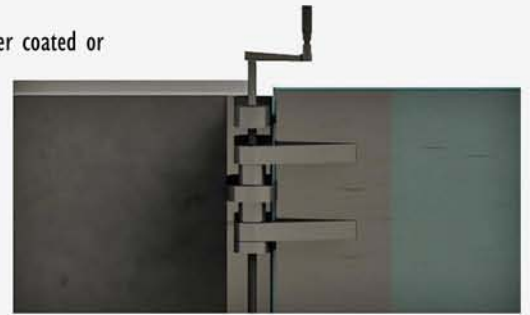
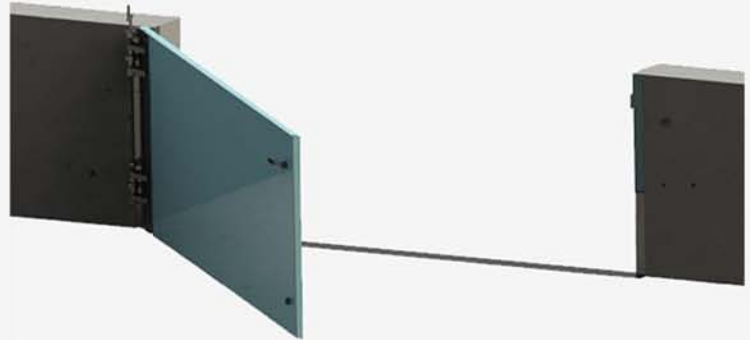
Westmoor's skills, knowledge, and conformity to strict marine rules and standards in the design and manufacture of watertight solutions means that our experience transfers perfectly to the development of flood defence.

Our innovative design team have developed a flood gate which complements our existing flood defence product range. We have tested doors up to 20 metres head of water and this knowledge has been transferred into its design creating a robust watertight solution.

Our flood gate is bespoke and can be customised to suit your requirements.

### Specification

- Sub-structure constructed from box section clad in sheet metal
- Connected to frame via a precision machined hinge assembly
- Secured in the closed position with a removable single lever which operates a number of locking dogs.
- Robust EPDM watertight seal
- Can be manufactured from mild steel, stainless steel, aluminium or even GRP
- Finished to suit the customer's requirements. Options include: Shotblast and painted, galvanised, powder coated or even clad in a wood effect veneer



## Bespoke Design

Westmoor has a dedicated in-house design capability using a range of software packages capable of creating 2D and 3D computer aided designs. Our experienced design team is able to rapidly generate concept designs and develop these into working solutions to suit individual client requirements across a wide range of applications including onshore and offshore programmes.

Westmoor implements an on-going Research and Development programme and works closely with the leading classification societies including Lloyd's Register, American Bureau of Shipping (ABS) and Det Norsk Veritas (DNV). Westmoor has established working relationships with the country's leading fire testing establishments.

## Analyses & Testing

Westmoor undertakes detailed analysis to validate new concepts and products. This activity is supported by Westmoor's close links with local universities who provide their expertise and software. Analysis helps optimise product design, performance and cost and includes in-depth analysis into, finite element, process modelling, advanced stress, fatigue and vibration and thermodynamic.

Westmoor's in-house testing facilities perform watertight, weathertight and gastight tests by subjecting products to high pressures from either compressed air or water. Westmoor also has a thermodynamic testing facility to provide information and data on material and product performance in fire situations. Further verification techniques include hydrostatic pressure testing, fire testing, weathertight, spraytight testing, gastight and pneumatic testing.

