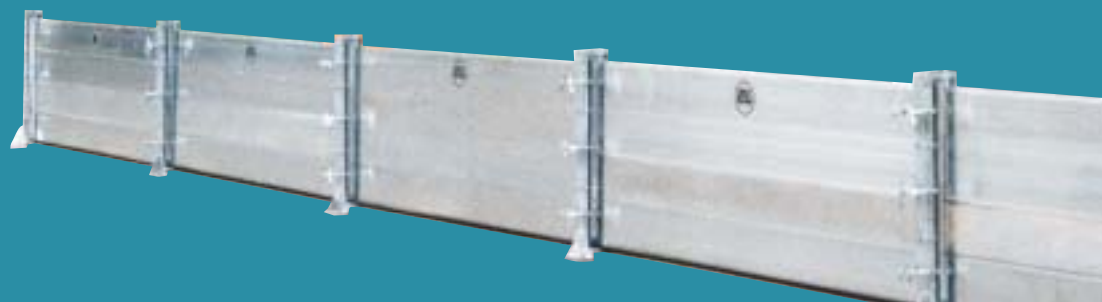




Flood Water Barriers – Inflow Protection

*Flood Protection Barriers
Flood Protection Walls*



Blobel Environmental Engineering

Blobel Environmental Engineering State of the Art Flood Protection Systems

In recent years, we have experienced more and more extreme weather conditions which have caused severe environmental damage and devastation.

BLOBEL has reacted to this trend. For over 10 years we have been a leading European business in the containment of contaminated fire fighting water and spill control. By developing simple and effective flood protection systems, both permanent and mobile, we have set standards in the market. The operating and sealing technologies we have implemented are now the basis of many new products in the market. Our flood protection systems are internationally approved.

On-site engineer consultation, installation and after sales service are, of course, part of our overall package.

Flexible and Reliable

Whether you require fast protection from flash flooding, or walls to protect your assets from rising water, our brand products convince through simple installation and handling. Our systems incorporate advanced fast closing mechanisms and light barrier sections which are handled with ease and can be stored where limited space is available. BLOBEL Flood Protection Systems are ideal to protect private and industrial assets. Through the simple design the barriers can be universally applied for doors, gates, windows and fields. All systems can be incrementally expanded.

Maximum Quality

Our flood barriers are known for the high quality of material used and their robustness. We apply the same high safety and quality standards for our flood protection products as we do for our emergency containment systems. The sealing technology is highly chemical resistant and can safely be used with uneven floors and rendered walls. All our products are subject to continuous quality assurance measures in keeping with DIN ISO 9001.





Effective Protection from Water and Mud

The Mobile Slide Insert Barriers System

Slide insert barriers are comprised of one or more barrier bodies that are guided into U-shaped mounting devices, attached and sealed against the building and placed under tension if required. The tension is applied through threaded couplings or special fast tension devices. The sealing side is easily reversible.

The U-shaped mounting devices are made of solid steel and are galvanised and powder coated. The barrier sections are made of polished aluminium with the option of paint finish or powder coating upon request.

Throughout our flood protection range we use standard parts as much as possible making spare parts available after several years.



Flood Water Barrier BL/HTL-TR



Two special tensioning devices are mounted on the barrier body and are used to easily lock and seal the barrier.



Flooding in summer 2002 - With kind approval from FAG Austria AG

Flexible and Safe: Additional panels can be inserted as the flood waters rise

Stackable Mobile Barriers

The barriers consist of several hollow aluminium segments which are placed into U-shaped mounting devices. The system is made to individually fit the required retention height and width. It can be universally applied for doors, gates and for retention walls in open areas. A compressible, highly adaptable seal is attached on the lowest barrier section. Each of the other barrier sections is fitted with an easily compressed seal, based on EPDM.

During standby time the systems are easily stored. The barriers are designed to use as little space as possible and the segments can be stored on special wall racks. Larger and heavier flood protection segments can be specifically designed to be moved by forklift.

The Seal

Our Flood Protection Systems are proven to be effective on difficult terrain. In most circumstances, it is not necessary to level the floor or incorporate steel plates within the concrete floor. Uneven ground, corrugated sheet metal, tiles and stones of up to 20mm are handled with ease.



**Well designed to the last detail:
An aluminium lip on the lower edge protects the highly flexible seal from damage by stones and floating debris.**



Flood Protection Barrier BL/HAP in use





Open Ground

BLOBEL Flood Protection Walls are also designed to be used in difficult terrain. The aluminium barrier sections slide into double U-shaped steel columns which are firmly bolted or anchored to the ground. The columns are designed to be either demountable or permanently anchored in place.



Stability with High Water Pressure

Depending on water flow and sealing direction, BLOBEL Flood Protection Segments are designed to fill with water (see left). This considerably increases stability of the protection systems and significantly increases the force on all seals.

The Right Design for Each Requirement

All BLOBEL Flood Protection Systems are available in 50mm and 80mm wide designs.

Maximum Safety

BLOBEL systems are manufactured in line with international safety and static requirements. Internal static calculations or independent static calculations can be provided for a fee.

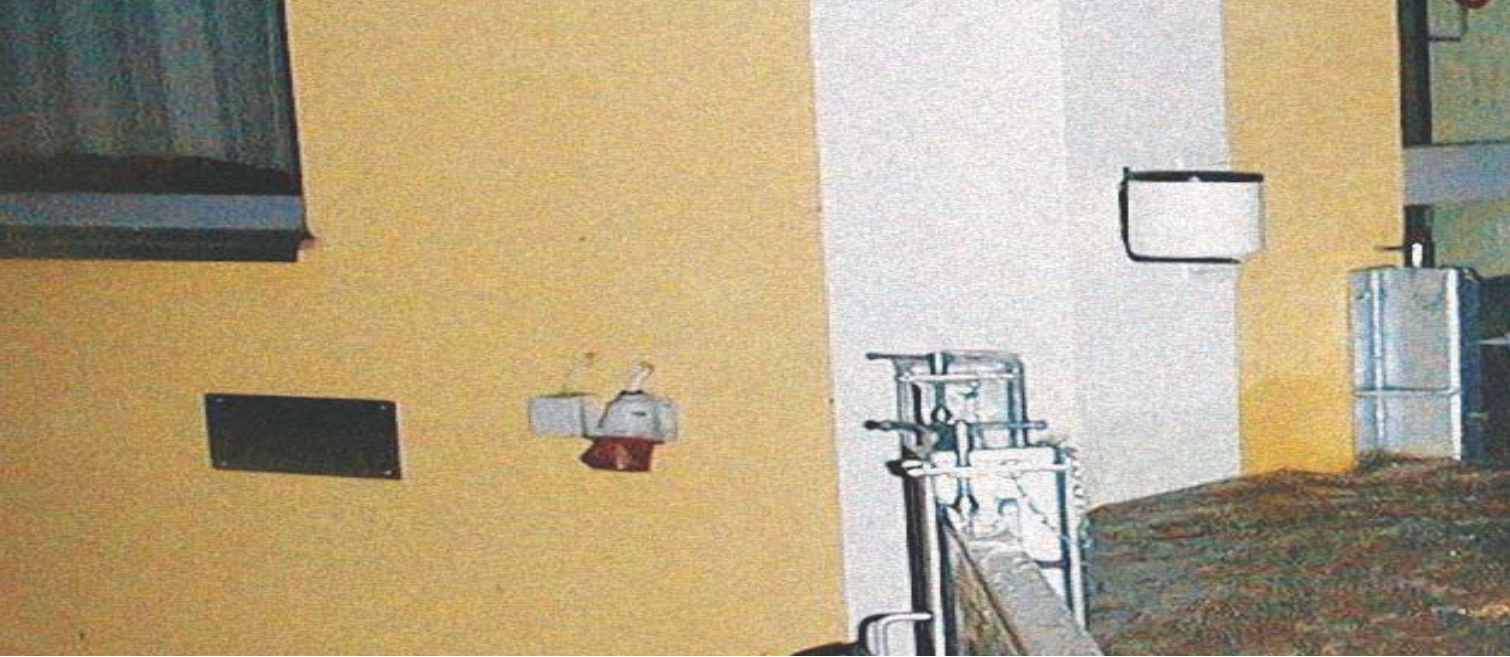


BLOBEL Flood Protection Systems are designed to withstand high water pressure. The double U-shaped steel columns are mounted on anchor plates, which are set in a concrete footing.



Specially designed barrier combination for corners. Easy and fast application.





Flooding in summer 2002 - With kind approval from FAG Austria AG

All Round Protection: Barrier Plates for Windows and Doors

Any opening can be sealed with ease. Systems can be mobile or permanently fitted for standard or specially designed windows. Crack free surfaces with up to 10mm of unevenness are ideal. Wall rendering and tiles can be handled with ease.

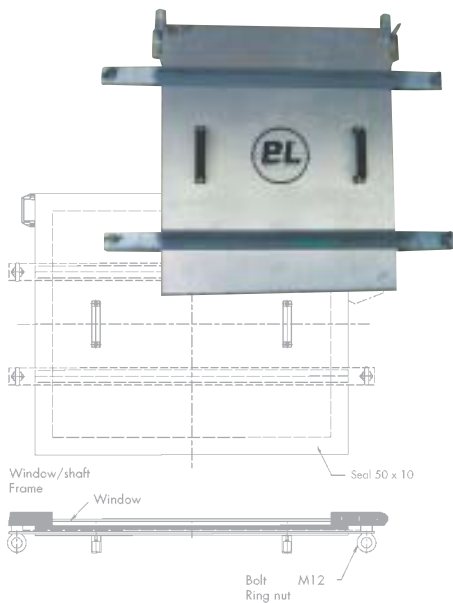
Handles and eyelets ensure easy handling. Special racks are available for storage.



Window Seal BL/FAP-PR2 with frame and pressure rails.



Flood Protection Combination BL/FAP-PR2 and BL/HAP-SB 200





Blobel Flood Protection Systems: Custom Made Solutions for All Your Requirements

We provide optimum solutions for all situations. We have systems for windows, doors, stormwater drains and rising waters along riverbanks. Custom made on request.

Well Designed for Ease of Operation

BLOBEL Flood Protection Systems can be put in place quickly and with little effort. In the event of an emergency or flood, the barrier sections are simply put in place and tightened. No extra seal application or assembly is necessary. This makes BLOBEL Flood Protection Systems first choice amongst both corporate and private customers.



Reliable all-round protection for your assets. Angled Garage Drive Ways, Cellar Windows, Switch Board Boxes: BL/FAP-P2, Garage Doors: BL/HAP-SB, Water Drains: BL/FAP-PR2, the top area of the photo shows: Flood Protection Wall: BL/HSW-SB



Stormwater inflow/overflow protection with Sealing Plate BL/FAP-P1, directly bolted.



Flood Protection Combination BL/FAP-PW1 and BL/HAP-eco

Planning, Installation and Service

Our consultation, planning and design services guarantee your system will comply in all aspects with legal requirements.

Our engineering consultation services include:

- Site analysis and assessment
- Development of strategies for securing private and commercial assets
- Quality assurance and monitoring

Delivery and installation by our professionals is an integral part of our service.

You will receive all of the necessary certification after each installation.

- Conformity with local building specifications
- Test certificates if required
- Table of resistance for the seals
- CE conformity declaration

Spare Parts

BLOBEL products are known for their highly robust nature. The stocking of spare parts for routine maintenance can therefore be limited primarily to wearing parts such as seals. Spare parts for all older designs are also available.

Our products are coordinated with one another, so special parts can also be integrated in existing product lines. Spare parts are conveniently available from the warehouse or with short notice delivery.



Your service representative

Blobel Umwelttechnik GmbH

Friedberger Strasse 4
86453 Dasing, Germany

Phone: +49 (0)8205/96 07-0
Fax: +49 (0)8205/96 07-20
E-mail: info@blobel.de

Blobel Environmental Engineering

PO Box 61, Bondi Rd.
Bondi NSW 2026
Sydney, Australia

Phone: +61 (0)2 9369 3504
Fax: +61 (0)2 9369 3504
E-mail: mail@blobel.de
<http://www.blobel.de>

An Overview of our Barriers

		Design Types											Tensioning			Implementation			Safety														
		Economy	Completely mobile	Mobile barrier bodies	Stationary mounting devices	One barrier body	Several barrier bodies	Flood protection wall	Plane sealing plate	Angled sealing plate	Framed sealing plate	Special automatic design	Profile: 200 x 50 mm	Profile: 150 x 80 mm	Profile: 115 x 50 mm	Traditionally bolted	External fast closing devices	Fast closing, mounted on barrier body	Pressure rails	Directly bolted	Window sealing	Door sealing	In the field	Channel inflow/overflow protection	Extreme conditions	Special design upon request	Design tested *	Field tested	Quality controlled	Ease of handling			
Barrier Systems	Slide Insert	BL/HST			•	•	•									•										•	•	•	•	•	•		
		BL/HEX			•	•	•										•										•	•	•	•	•	•	
		BL/HTL			•	•	•											•									•	•	•	•	•	•	
		BL/HTL-TR			•	•	•											•									•	•	•	•	•	•	
		BL/HAP			•	•	•	•										•										•	•	•	•	•	•
		BL/HAP eco	•	•	•	•	•	•							•			•										•	•	•	•	•	•
Barrier Systems	Stackable	BL/HTL-SB			•	•	•	•					•			•											•	•	•	•	•	•	
		BL/HTL-SB vario			•	•	•	•									•											•	•	•	•	•	•
		BL/HAP-SB			•	•	•	•						•			•										•	•	•	•	•	•	
		BL/HSW-SB			•	•	•	•		•				•			•										•	•	•	•	•	•	•
Barrier Systems	Fixed	BL/HED				•	•					•				•										•	•	•	•	•	•		
		BL/HHS				•	•						•				•										•	•	•	•	•	•	
Sealing Plates		BL/FAP-P			•	•					•										•	•	•				•	•	•	•	•	•	
		BL/FAP-PR			•	•						•										•	•	•				•	•	•	•	•	•
		BL/FAP-W			•	•						•										•	•	•				•	•	•	•	•	•
		BL/FAP-WVR			•	•						•										•	•	•				•	•	•	•	•	•
		BL/SAP			•							•										•	•	•				•	•	•	•	•	•

* Design-tested: • Certification ○ Analogous testing

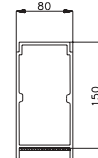
The Right Design for Each Requirement

Flood protection demands real solutions that deliver safety and aesthetics.

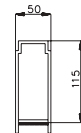
BLOBEL Flood Protection Systems offer several barrier profile dimensions and we will advise you which profile is best suited for your project.



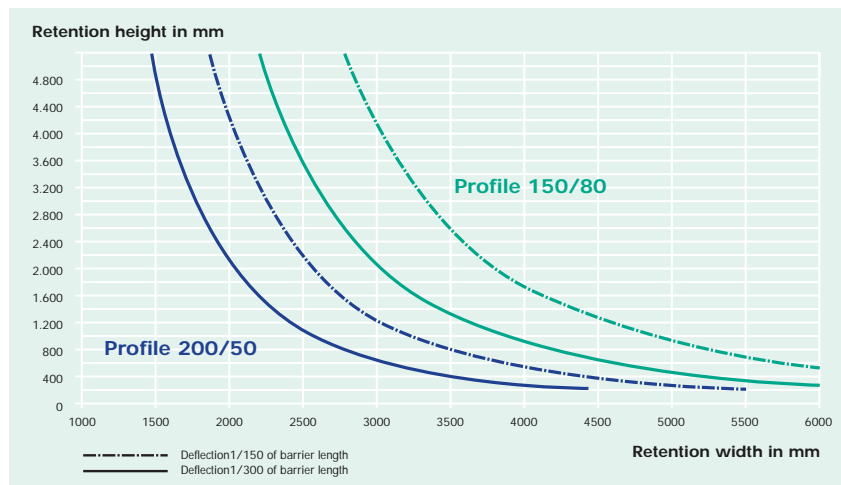
Standard profile
200 x 50 mm



Standard profile
150 x 80 mm



Special profile
115 x 50 mm



Maximum reliability with BLOBEL Flood Protection Systems.

In practise, our special designs have shown stability 1.5 – 3 times above average.

Static requirements are easily checked with the illustrated graph and BLOBEL underlines the high standard and safety of its Flood Protection Systems.

Our Field-Proven Barriers are Available in the Following Basic Designs

External Fast Closing Device

In the event of a flood or emergency the barrier bodies are placed into mounts installed either in front of, or within, the opening and then pressed against the ground by means of external tensioning levers.



Flood Protection Wall Stackable with Tommy Screws

One or more barrier body is placed into mobile or permanently fixed double U-shaped steel columns. The barrier sections are pressed against guiding rails and the ground with tommy screws. Guiding rails and barrier bodies are fitted with seals.



Fast Closing Devices Mounted on Barrier Body

In the event of a flood or emergency the barrier bodies are placed into mounts installed either in front of, or within, the opening and then pressed against the ground by means of closing devices mounted on the barrier body.



Special Automatic Design

Automatic barrier – operation on a gate-like principle



Fast Closing Device Stackable System

Two or more barrier bodies are placed into mounts installed either in front of or within the opening. These are pressed against the guiding rails and the ground by means of closing devices mounted on the barrier body. Guiding rails and barrier bodies are fitted with seals.



Channel Inflow Protection

Suitable for Channel inflow or overflow protection. Horizontal or vertical installation.



Traditionally Bolted

The barrier body is placed into narrow mounting devices and pressed against the ground with tommy screws. Guiding rails and barrier bodies are fitted with seals.



Window Sealing Plates

Aluminium plate or reinforced steel plate. Force is applied through special pressure rails or tensioning devices fitted on the plate.



Stackable System Traditionally Bolted

Two or more barrier bodies are placed into narrow mounting devices and pressed against guiding rails and the ground with tommy screws. Guiding rails and barrier bodies are fitted with seals.



Special Cases

Angled alloy or reinforced steel plate. Ideal for windows and doors situated near corners.

