PROTECTING BUILDINGS AGAINST FLOOD RISK

DEMOUNTABLE BAUER-IBS BARRIERS

An effective protection from flooding to domestic properties is now available

Flood catastrophes occur ever more frequently in Europe. The damage caused is both financially and emotionally crippling for property owners and the danger of serious flood events entirely destroying the contents of the ground floor is increasing by the year.

A System which prevents the flood is far more preferable to searching for a cure after the flood has happened. The one-off cost for a completely effective flood defence System is guaranteed to repay the investment in just one event. The long design life of these Systems also ensures complete future protection.

A failsafe solution

Flood Protection Systems are only useful in practice if they are stable and reliable.

The demountable BAUER-IBS barriers consist of horizontal beams and vertical rails (U-shaped profiles) of highly robust extruded aluminium - they have demonstrated proven results in the large-scale protection against flooding of cities all over the world.

These modern, robust and effective Systems make sandbags and temporary devices redundant, and are re-usable time and time again over their very long design life.

An affordable flood prevention concept

Today this material is also affordable to private individuals, thanks to its innovative design and simple installation.

The above picture illustrates just how simple and effective the System actually is. Within a matter of minutes the barrier can be in place to ensure complete security. Permanent posts to each side of the opening, or to the façade, are always in place and ready to accept the leak-resistant beams.
Solutions for Domestic Properties
Light Preventative Flood Defence Barriers

APPLICATIONS: Flood Protection

- Garage entrances, doors
- Gates
- Openings
- Passages

DIMENSIONS

The BAUER-IBS Light Flood Protection Barriers are available in 2 models:
- Model IBS 50 x 166 (thickness = 50 mm, height = 166 mm) and
- Model IBS 50 x 300 (thickness = 50 mm, height = 300 mm)

Maximum height = 2.125 m
Maximum width = 2.50 m

Explanations:

The chart below allows estimation of the number beams required for a specific application.

Example 1: you wish to protect against a flood of height = 60 cm (600 mm)
For this, two possibilities exist:
- use 4 beams of model IBS 50 x 166, providing flood defence height of 685 mm or
- use 2 beams of model IBS 50 x 300, providing flood defence height of 617 mm

Example 2: you wish to protect against a flood of height = 1.70 m (1700 mm)
For this, there is only one option available:
- use 6 beams of model IBS 50 x 300, providing flood defence height of 1825 mm

<table>
<thead>
<tr>
<th>Type (number of dam beams)</th>
<th>Effective Defence Height (mm) (model IBS 50 x 166)</th>
<th>Effective Defence Height (mm) (model IBS 50 x 300)</th>
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<tbody>
<tr>
<td>1</td>
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<td>7</td>
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<td>2127</td>
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MOUNTING

The vertical channels can be fitted in two ways:

(E) Barriers mounted in the reveal
(A) Barriers mounted on the facade

COMPOSITION

- Horizontal beams
- Vertical channels
- Seals
  a) Seals between the dam beams
  b) Seals to the vertical channels
  c) IBS special base seals
- Clamping wedges

TECHNICAL FEATURES

- Minimum wall depth (reveal-mounted System):
  within the reveal = 360 mm,
  effective opening width is reduced by = 10 cm/side,
- Material of beams and channels = AlMgSi 0.5,
  anchors/bolts = A4 steel,
  base seal = PE PUR,
  seals between the dam beams = EPDM.
- Resistance data: hydrostatic pressure
  plus a safety margin of 35 %,
- Leak rate i.a.w. DIN 19 569-4
- Wall opening = concrete of quality ≥ B25
The vertical channels are mounted in reveal of door or opening.

REMARKS

- The minimum wall thickness must be 36 cm
- The opening width is reduced by approx. 10 cm on both the sides
- The fixing bolts require concrete strength not less than B25
- The base must be even and free of level variations > 1 cm
(F) BARRIERS APPLIED ON THE FACADE

The vertical channels are mounted on facade, on outer face of opening.

REMARKS

- The minimum wall thickness must be 10 cm
- A salient dimension of 20.3 cm is required on both the sides of the opening
- The fixing bolts require concrete strength not less than B25
- The base must be even and free of level variations > 1 cm
HOW TO OBTAIN A QUOTATION

Simply fill out the attached sheet (use one sheet per opening type if several different openings are to be protected).

1. Defining the Type of the Opening to be Protected

   - Building openings:
     - Entrance door
     - Window
     - Window-door
     - Large opening
     - Garage door
     - Basement window
     - Others (please specify)

2. Defining the Type of Walls on Which the Vertical Channels are to be Fitted

   - Wall Material
     - Concrete
     - Solid masonry
     - Hollow masonry
     - Natural stone
     - Others (please specify)

3. Indicating the Opening Dimensions

   - \( L \) = width of the opening \( \ldots \) mm
   - \( H \) = total height of the opening \( \ldots \) mm
   - \( E \) = thickness of the structure \( \ldots \) mm
   - \( H_p \) = desired protection height \( \ldots \) mm

![Diagram of flood defence barrier system with dimensions labeled L, H, and Hp.](image)
### 4. Completing the Summary Chart

<table>
<thead>
<tr>
<th>Number of identical openings to be protected</th>
<th>Required flood defence height Hp</th>
<th>IBS standard height</th>
<th>Fastening type</th>
<th>Opening width L</th>
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**N. B.**

- Always choose an IBS *standard* height = higher than Hp (safety margin)
- Indicate all dimensions in mm
- Fitting Type:
  - R: In the reveal (Note: clear opening width is reduced by 20 cm)
  - F: Fitted on the facade (Note: a 20.3 cm zone is required both on left and right side of the opening)

### 5. Your Details

1. **Surname:** _________________________________________________________
2. **First Name:** _________________________________________________________
3. **Address:** _________________________________________________________
   _________________________________________________________
   _________________________________________________________
4. **Country:** _________________________________________________________
5. **Home Telephone:** _________________________________________________________
6. **Mobile Telephone:** _________________________________________________________
7. **Fax:** _________________________________________________________
8. **e-mail:** _________________________________________________________

### 6. Additional Information

Briefly describe below the location and the conditions of the property to be protected from flooding and specific risks, if known, in your area.
Simply send back to us a copy of the dimensioning page with all necessary additional details of your specific location and conditions (photos – via e-mail as jpg file, sketches, drawings, etc.)

Fax: +44 (0)1925 244133
or
E-mail: info@bauerinnercity.co.uk

*Important - Always indicate in your response the postal or electronic address to which you would like us to send the information*

Your enquiry will receive our careful and prompt attention.

Should you have any further questions please do not hesitate to contact our head office:

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