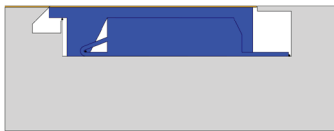
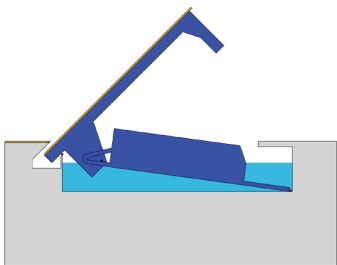




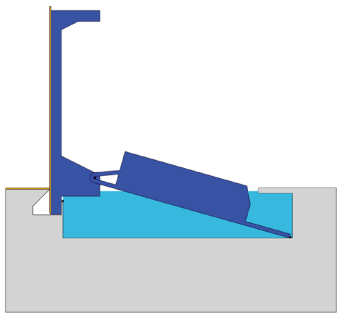
Self-Operating Flood Barrier



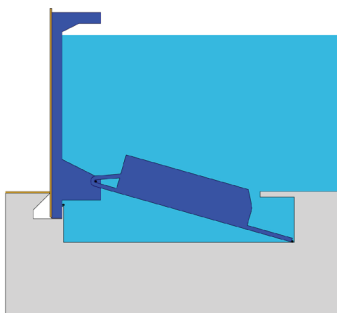
Hidden Under Floor
No Obstruction



Automatic Operation
No Power Required



Gate Upright Before Flood
Reaches Floor Level



Flood Protection
Up by Buoyancy,
Down by Gravity

Aquafragma

Aquafragma is a self-operating flip up flood barrier (patent applied for GB 1403974.7). It is normally hidden inside pavement and rotates automatically to upright position, by buoyancy action only, requiring no power at all. Full protection is achieved before flood reaches pavement level.

How Aquafragma works?

A gate normally rests flat with pavement above a buoyant body. The gate and the buoyant body are hinged so that on rotation the two bodies move away from each other. When hydrostatic pressure develops, the buoyant body forces the gate to rotate upwardly and the gate turns to upright position automatically before flood reaches pavement level.

The barrier has the option of returning automatically to its normal position flat with pavement or locking automatically in upright position.

Where Aquafragma works better?

Aquafragma may be used:

- In front of building entrances
- Along rivers, canals
- Along coastal promenades
- At the crest of basement ramps

In front of openings of areas prone to flooding where:

- The barrier requires no power, no human intervention and no moving parts
- Minimum excavation, if any, is required
- The top surface blends with the surrounding environment
- Any traffic can pass over the barrier, when it is flat with pavement
- Aquafragma is securely locked and it is self unlocked before activation
- The barrier issues sound and light warnings when rotation is imminent and when it is in operation

Co-funded by:



Developed by:



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