Flow Defence

Self-Activating Flood Barriers

A long-term flood response for openings where water can arrive faster than people can act.

Flow Defence systems are designed and manufactured in Australia for residential, commercial and infrastructure openings with varied access requirements.



PASSIVE FLOOD RESPONSE

AUSTRALIAN DESIGNED

CONCEALED SYSTEM



BARRIER CONCEALED



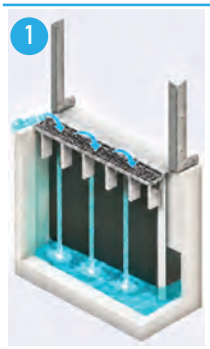
BARRIER ACTIVATED

Water Drives The Response

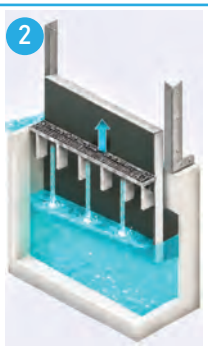
The system intercepts floodwater at the protected opening. Incoming water becomes the energy source for raising the concealed barrier.



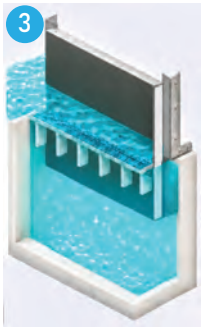
How The System Works



1. Floodwater crosses the inlet grates at the selected access point.



2. Water fills the chamber and buoyancy lifts the guided barrier from below ground.



3. The raised barrier engages its seals, retaining water on the exposed side.

Key Benefits

- Integrated collection channel
- Removable inlet grates
- Sump for settled sediment
- Pumps manage minor inflow
- No pre-event assembly required

Common Applications

- Basement carparks
- Apartment driveways
- Industrial Accessways
- Loading docks
- Residential Garages
- Utility facilities







Product Features And Engineering



The concealed assembly combines buoyancy, structural restraint, sealing interfaces and drainage in one engineered system.

Precast or Cast In Situ options available.

System Overview

HDPE outer surfaces enclose an aluminium support frame and rigid foam core. The barrier travels between structural channels installed in a reinforced concrete chamber.



Typical System Features

- Rubber seals engage against fixed seal plates
- Guide channels transfer loads into the chamber
- Corrosion-resistant fasteners and steelwork
- Grates limit entry of larger floating debris
- Pump controls and discharge pipework within the chamber

Project Delivery Sequence



1 PRECAST – Excavate the trench and pour a concrete blinding layer.



2 PRECAST – Lift the fully fitted precast concrete chamber into the prepared trench.



1 CAST IN SITU - Transport components to site.



2 CAST IN SITU - Install components into chamber onsite.

Inspection Access

Removable grates allow sump cleaning and component inspection without routine removal of the barrier.



Site Design And Ongoing Support

The same passive principle can be adapted to many opening sizes, building arrangements and operating environments.

Suitable For

- Commercial Buildings
- Industrial Facilities
- Warehouses
- Public Infrastructure
- Utilities
- Residential Applications

Why Choose Flow Defence

- Practical flood protection solutions tailored to site conditions
- High-quality engineered systems
- Support for a wide range of opening types
- Clear operation and maintenance guidance
- Inspection and cleaning support available

Project Support

Provide approximate opening dimensions, site photographs or drawings, and available flood-level information for an initial suitability review and indicative pricing.







Talk To Flow Defence About Your Self-Activating Flood Barrier Project

Discuss your project requirements and find the right self-activating flood protection solution.

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