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# Flooding Solutions

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## Sliding Retractable Automatic or Manual

Designed for installation against structural concrete, masonry, or steel walls to provide a flood water resistant barrier.



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## Applications

Building entries, doorways, elevator openings, stairwell landings window protection

## Features

Ease of use  
Can be concealed within building fabric  
Ready at place of need – no storage needed.  
Manual or self-closing options

## Benefits

Swift deployment when required, by a single person in just minutes or via automated self-closing mechanism.

## Design

Sliding flood barriers are designed to transfer the developed hydrostatic loads to building structure walls and floors.

Design safety factor of barrier supporting elements are rated against design flood levels to maintain a minimum 2:1 relationship. Metal yield strengths are selected based on the total N/m<sup>2</sup> able to be developed as a result of design flood height.

## Materials

All frames use heavy duty Duragal. C450L0 to AS 1163.  
Lining and strike plate materials vary per application.

## Finish

Unless otherwise agreed: A & I Coatings vitrethane. 630 two pack aliphatic polyurethane min. 50 micron thickness.

## Sealing

EPDM Rubber solid flat section

Seal performance under the design flood depth of water:

The pressure against the wall is based on the following formula:  
Pressure in liquid = depth (m) x density (kg/m<sup>3</sup>) x gravitational acceleration (9.81 m/sec<sup>2</sup>).

For example, at 2.0m depth, the pressure is 19.6kN/m<sup>2</sup>.

The design allowance for the Sliding Flood Door is 2.5 times the design flood pressure. The effectiveness of the water seal against leakage exceeds the allowable leakage rate intent of design standards under the design flood depth.

## Performance

Sliding flood barriers are designed for nominated flood water height and will transfer developed imposed (hydrostatic) loads to adjacent structure.