# Flooding Solutions

# Flood Windows

Our engineers have designed impact resistant steel window frames that are integrated into a building's fabric to maximize structural strength.

Combined with high strength glass laminates fixed with watertight seals, our flood windows offer long design life, are maintenance free and have zero ongoing operational costs.



Flooding Solutions

PO Box 431, Neutral Bay, Sydney NSW 2089 (02) 9904 7099 info@floodingsolutions.com.au

# **Flooding** Solutions

# Flood Windows

# **Applications**

Buildings and walkways

## **Features**

Standby flood protection permanently mounted to building.

## **Benefits**

Maintains visual amenity in commercial/retail/public area situations.

# Design

#### Window Metal Sections

Window support frames are designed to transfer the total developed hydrostatic loads to building structure supporting walls and floors. The modular frame overlaps external wall fabric to ensure the transferred hydrostatic loads are applied evenly over the total perimeter contact between window frame and building structure. Fixing points are provided only for locating and alignment of window frame. The window frame design provides sealing connecting profiles to allow the frame to be totally sealed into the buildings structure.

#### **Glass Panel Sections**

Glass panel sections are designed to transfer the developed hydrostatic loads to the window frame via the continuous surface contact between frame surface and glass.

# **Materials**

#### Flood Window Frame

- Heavy duty duragal S.H.S – 100mm x 100/50mm x design duty thickness grade C450L0 to AS 1163.

- Heavy duty duragal angle – 150mm x 90mm x 10mm grade C450L0 to AS 1163.

#### **Fixing Support Blocks**

- Hot rolled structural steel bars and sections to AS 3679 -1990

#### **Glass Sections**

- Clear toughened safety glass with arriss edges.
- Thickness varying from 12mm, 15mm, 19mm based on design duty.
- Designated grade A safety glass for compliance with AS 2208.

#### **Glass Joint Cover Sections**

- Aluminium sections to selected profiles.

## **Finish**

All surfaces provided with A&I Coatings 2 pack epoxy enamel paint finish including:

- V586A zinc rich primer.
- V416A high build epoxy coating.
- V620A polyurethane industrial coating.

## Sealing

Glass to frame glazing tape and Sikaflex-Pro sealant. Frame to wall Sikadur Combifex and Sikaflex-Pro sealant. Minor gaps filled with Sikaflex-Pro sealant.

#### Performance

As per Design detail above

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