# FLAP GATES

The AWMA Flap Gate is a one way/non-return flap gate designed to prevent backflow.

## **FEATURES & BENEFITS**

- Automatically isolates stormwater pipes.
- Effective backflow prevention device.
- Dual adjustable pivot arms for robust operation and consistent contact.
- Low head loss.
- Full perimeter sealing.
- Designed for up to 3m head pressure as standard.
- Custom designed to isolate any orifice including pipe and box culvert outlets.
- Requires minimal civil works to install.

## **APPLICATIONS**

- The Flap Gate range is used for many applications across all industry sectors.
- Primarily used as backflow prevention devices for stormwater management and to prevent ingress from tidal flows and floodwater.







## FLAP GATES

## **DESIGN**

#### **DESIGN SUPPORT**

- AWMA's R&D and Engineering teams are available under Early Contractor Involvement (ECI), to assist in developing water control and screening solutions for bespoke green-field and brown-field sites.
- Flap gates shall have dual adjustable pivot arms for robust operation and consistent contact.

#### SIZES

- All AWMA water control gates are custom sized to ensure they meet specific site and operational requirements.
- · Customisation reduces installation costs.

#### MATERIALS

- AWMA select materials to meet a minimum design life of 25 years.
  Where required, AWMA can offer higher grade materials, coatings and protection systems to extend the design life to 100+ years.
- Materials used for doors and frames include marine grade aluminium and grades 304, 316, 2205 and 2507 stainless steel.
- Flap Gate seals shall be mechanically fastened (non-adhesive) and are designed for ease of replacement.
- Plasticised PVC or EPDM are used for the manufacture of seals. These materials offer superior endurance in wastewater and freshwater applications.
- Suitable for corrosive tidal environments.

#### MAINTENANCE

- The Flap Gate range has a minimum 25year design life.
- Minimal maintenance is required offering low "whole of life" costs.
- If required, the seal can be changed with ease, on site.

## **MANUFACTURE**

- All AWMA products meet relevant Australian and international standards.
- All stainless steel welding is continuous to avoid crevice corrosion.
- AWMA hold international accreditations for ISO 9001; Quality, ISO 14001; Environment and ISO 45001 OH&S management.
- AWMA's Integrated Management System aims to provide a framework to deliver products and services that consistently exceed customer expectations.

### **INSTALLATION**

#### MOUNTING OPTIONS

- Flap Gates are typically mounted to a culvert headwall or pipe.
- Frame requires a minimum 200mm clearance either side and below the aperture for installation.
- Frame can be a circular design for mounting to the outside of a pipe.

## **COMMISSIONING**

#### DOCUMENTATION AND TRAINING

- Detailed documentation on operation, testing procedures and maintenance will be provided with all AWMA water control solutions.
- · Comprehensive on and/or off site training available.
- The dual pivot arms to be adjusted post install to confirm seal engagement.







