

Bespoke to Any Size

Lloyd's Register Tested

Eurocode Designed

ISO 12944 C4 / C5 Paint

50-Year Design Life

PRODUCT SPECIFICATION

Flood Gates

Bespoke Steel Flood Protection — Single, Double, Bi-Fold & Pedestrian



Key Features

- Bespoke to Any Opening**
 Each gate is individually engineered to suit the clear opening, flood level and loadings — no standard sizes.
- Full Range of Configurations**
 Single swing, double swing, bi-fold and pedestrian gates — with sliding and hydraulic options also available.
- Choice of Materials**
 Manufactured in aluminium, mild steel or stainless steel up to grade 316L to suit the environment.
- Permanently Installed, Rapidly Deployed**
 Stored in the open position and swung closed and latched when flooding threatens.
- Compression Seal System**
 Closed-cell EPDM with bonded gasket — no compressed air or inflation required.
- Precision-Machined Hinges**
 Brass bearings and stainless steel pins with grease nipples for free, low-effort operation.
- Marine-Grade Coating**
 Blast cleaned to SA 2.5 and finished to an ISO 12944 C4 or C5 protective paint system.
- Independently Leak Tested**
 In-situ leak testing witnessed by Lloyd's Register against permitted leakage limits.

CONSTRUCTION

 100x100x5 SHS
 Typical matrix

MATERIALS

 Steel / Alu
 SS to 316L

SEAL

 EPDM
 Compression

PAINT

 ISO 12944
 C4 / C5

TESTING

 Lloyd's
 Register

DESIGN

 Eurocodes
 50-yr life

MM Engineering

Unit 4B Sirius Drive, Baglan Energy Park, Port Talbot SA12 7BR

Technical Specification

MME flood gates are bespoke steel structures designed in-house and verified by chartered engineers to Eurocode standards. Each gate is fabricated from a welded structural hollow section matrix with plate cladding, finished in a marine-grade paint system, and independently leak tested before handover. The details below are typical — exact construction varies with each gate's size, configuration and design loadings.

ITEM	SPECIFICATION (TYPICAL)
Configurations	Single swing, double swing, bi-fold, pedestrian; sliding & hydraulic also available
Materials	Aluminium, mild steel or stainless steel up to grade 316L
Leaf matrix	Typically 100×100×5 SHS, EN 10219 grade S355
Cladding	Typically 5mm plate both faces, EN 10025 S275, seam welded with puddle welds
Frame / jamb	Steel, cast-in or drill-fixed to structure
Seals	EPDM compression seals (vertical, base & centre types), bonded gasket
Seal design life	25 years (EPDM)
Gate design life	50 years
Hinges	Precision-machined, brass bearings, stainless steel 303/304 pins, grease nipples
Locking	Manual ratchet spindle with lockable padlockable covers; lift-up handle on pedestrian gate
Operating force	5–10 kg push (swing / double); 10–15 kg (pedestrian)
Paint system	ISO 12944 C4 or C5; blast cleaned to SA 2.5
Colour	Bespoke RAL / BS to client specification
Design standards	BS EN 1990, 1991-2/-4, 1993-1-1, 1993-1-8, BS 7818; SLS & ULS
Fabrication	Execution Class EXC2 or EXC3
Fixings	M20 BZP / A2 stainless; chemical anchors to structure
Leakage performance	Double leaf <0.5 L/15 min (42 L permitted); pedestrian 0 L (10 L permitted)
Installation	By MME-trained installers



Precision-machined hinge assembly with brass bearings and stainless steel pin, shown installed on a double swing flood gate.

Certification & Quality

Every flood gate is designed by chartered structural engineers to Eurocode standards, with full SLS and ULS analysis, and manufactured under our quality management system to Execution Class EXC2 or EXC3.

Gates are leak tested in situ with independent witness by Lloyd's Register. A full documentation pack is provided: structural calculations, material certificates, test reports, paint inspection records and O&M manual.

Built Bespoke to Your Requirements

Every gate is engineered and manufactured to order. We design, fabricate, paint, test and install — a complete single-source flood protection solution.

[Contact us for a same-day quote](#)