

Galvanised HEELPROOF™ Grate & Frame



Technical Guide D16.8

The HEELPROOF™ grate is an ideal product for use on common sized concrete sumps, where pedestrian safety is required.



01.24 | DRAINAGE | D16.8 HEELPROOF GRATE AND FRAME

Applications

Service Stations
High Volume Pedestrian Areas
Sump and trench versions available

Features

Screened grate style reduces aperture
Anti-slip cleats for improved slip resistance
Galvanised steel construction for long life
Class A, Class B, and Class D rating
Flat edged frame for ease of use with pavers or concrete/asphalt

Approvals / Standards

Load Tested to AS3996:2019 in Class A, Class B, and Class D
P5 rated for slip resistance to AS4586-2013

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The EJ HeelProof grates are made from durable galvanised steel for a long service life.

They are ideal for high volume pedestrian walkways. With Class A, Class B, and Class D load ratings, there is a grate suitable for all shared space applications.

Product Attributes

- Galvanised finish for long life.
- Anti-slip cleat surface for improved slip resistance.
- Narrow openings make the grates safe for all footwear.
- Galvanised lugged frame for easy embedding in concrete.

TABLE 1 HeelProof available sizes

Code	Dimensions
SUMP FRAME AND GRATES	
CLASS A (Pedestrian loading 10 kN or 1 tonne)	
GGHS450450AGF	450 x 450
GGHS610610AGF	610 x 610
GGHS675450AGF	675 x 450
GGHS910610AGF	910 x 610
GGHS910910AGF	910 x 910
CLASS D (Heavy Traffic loading 240 kN or 24 tonne)	
GGHS300300DGF	300 x 300
GGHS450450DGF	450 x 450
GGHS610610DGF	610 x 610
GGHS675450DGF	675 x 450
 GGHS910610DGF	910 x 610
GGHS910910DGF	910 x 910
TRENCH FRAME AND GRATES	
CLASS B (Pedestrian/Light Traffic loading 80kN or 80 tonne)	
 GGHS150ATGF	150 x 1 m
 GGHS250ATGF	250 x 1 m
 GGHS300ATGF	300 x 1 m
CLASS D (Heavy Traffic loading 240 kN or 24 tonne)	
 GGHS150DTGF	150 x 1 m
 GGHS250DTGF	250 x 1 m
 GGHS300DTGF	300 x 1 m


 = Available on Indent order only



FIG. 1



FIG. 2

Flow Rate Calculations

Assumptions

1. Standard orifice flow conditions exist
2. Grates are installed flush to the ground in a level area
3. The inlet is not fully drowned (*orifice discharges to atmosphere*)
4. Effects of Turbulence and Friction are not calculated
5. Ponding water is assumed to act as a reservoir with negligible flow velocity

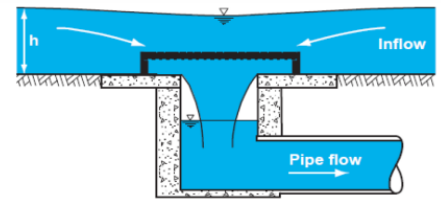
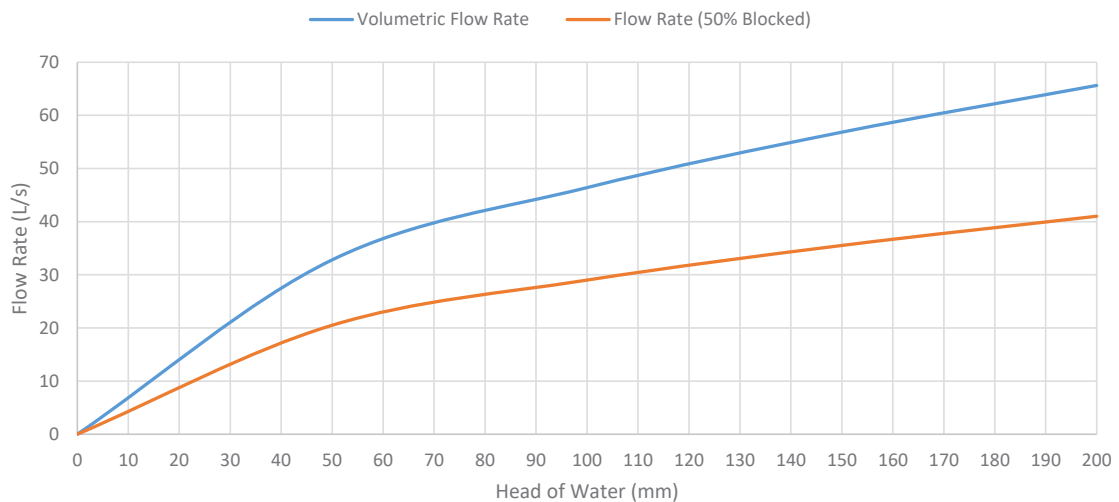
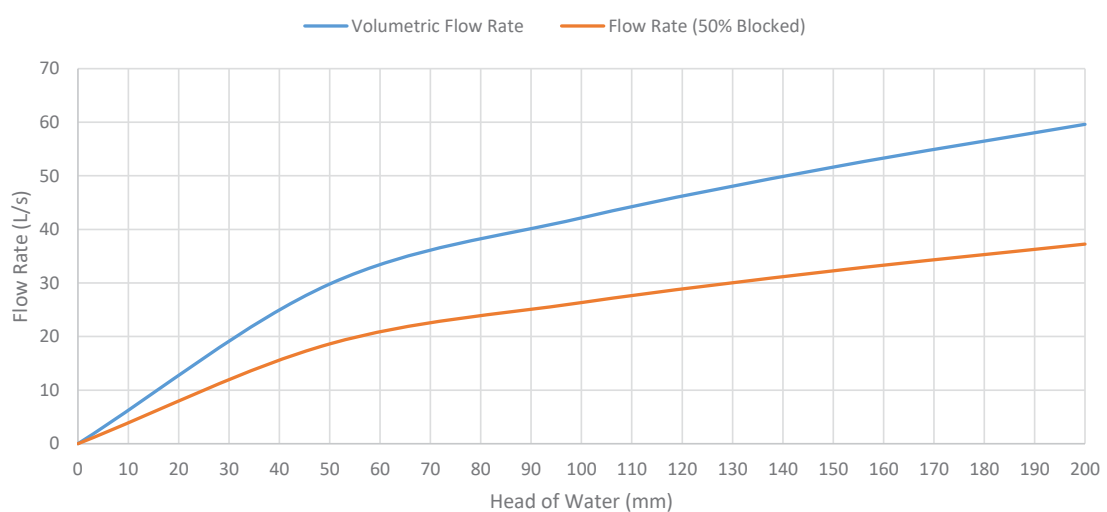


FIG. 3 Orifice flow conditions (Queensland Transport, 2013).
Note: Illustration only. Correct installation requires that grates are mounted flush with ground.

Flow Rate Estimate GGHS675450AGF



Flow Rate Estimate GGHS675450DGF



Disclaimer: Full flow rate estimate reports are available on request.

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