

# Hydro Slam Lock Stormwater Grate and Frame

Technical Guide D16.12

The Hydro "Slam Lock" Grate and Frame is a high-quality stormwater catch pit grate that is visually appealing, cycle friendly, compliant with the latest standards, and has a superior flow capture capability.



05.23 | DRAINAGE | D16.12 HYDRO SLAM LOCK STORMWATER GRATE AND FRAME

## Applications

Stormwater catch pits, where high performance and public safety are critical

Main arterial roads with high traffic volumes

## Product Attributes

The "Slam Lock" feature ensures positive closure

Ductile iron casting sustains high impact loads

Large open area gives an increased hydraulic capture

A visually appealing grate that is cycle friendly

Grate is hinged and retained by torsion locking catches - no accidental opening

Lightweight, flat design to replace the conventional heavy concave grate and frame

## Approvals/Standards

Manufactured and tested to AS3996:2019 Class D Loading and HN-HO-72 Transit Loading 240kN

Complies with Auckland Council and Auckland Transport safety requirements for catch-pit inlet grates

## Quality

ISO 9001:2008 Quality Management Standard

*We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.*

The Hydro Stormwater Grate is a high quality cast Ductile Iron product. It is designed to provide many years of reliable service in even the busiest roads. The new “Slam Lock” feature will provide security from accidental opening by the public, making it ideal for residential areas where children may play.

### Design Specifications

- Matches the clear opening dimensions of the corresponding standard concrete sumps.
- Frame incorporates side locking for better anchoring in the surrounding concrete apron.
- With its unique wavy pattern, the Hydro Grate disrupts and captures water flow far more efficiently than a conventional slotted grate.
- Each grate bears the image of a New Zealand fish, the Inanga, to remind people that this grate “Drains to the sea”.
- Manufactured with ductile iron - up to 35% lighter than a conventional cast iron grate and frame with greater strength .
- All castings are marked with the manufacturer, weight, standard, and class rating, in accordance with Standard AS/NZS 3996:2019.
- Grate opens to a maximum of 115°



### Testing

- Tested by the accredited laboratory of WSP International Ltd in accordance with the Standard AS 3996:2019

### Durability

- Ductile iron material provides excellent corrosion resistant properties and sustains high impact loads.

### Product Range

- The “Slam Lock” Hydro Grate is available in the sizes below.

**TABLE 1 Product Range**

Code	Description	Weight (kg)
DIHSTGFDSL	Hydro DI Stormwater Slam Lock 675 x 450 Grate & Frame Class D	66.5
DIHSTGFD8045SL	Hydro DI Stormwater Slam Lock 800 x 450 Grate & Frame Class D	73

# Dimensions and Flow Rates for DIHSTGFDSL

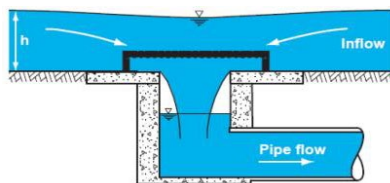
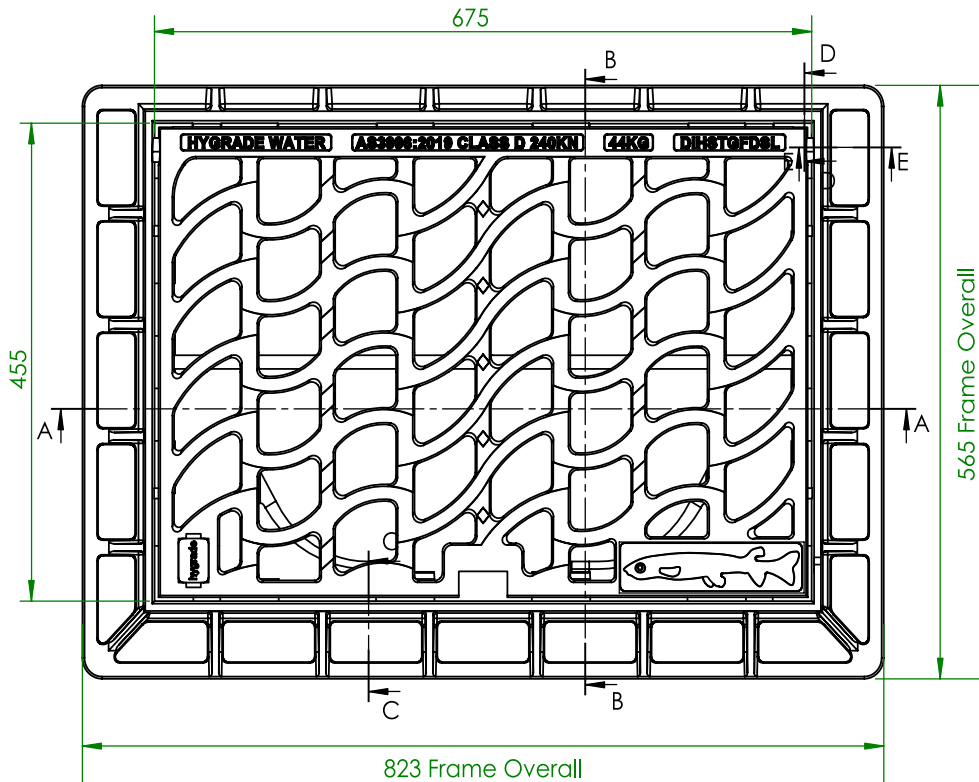
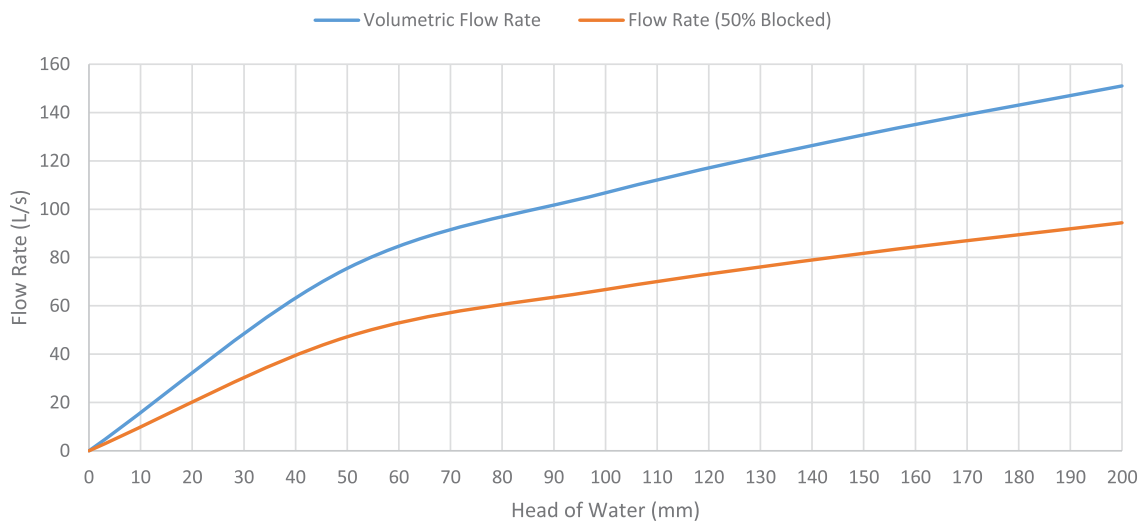
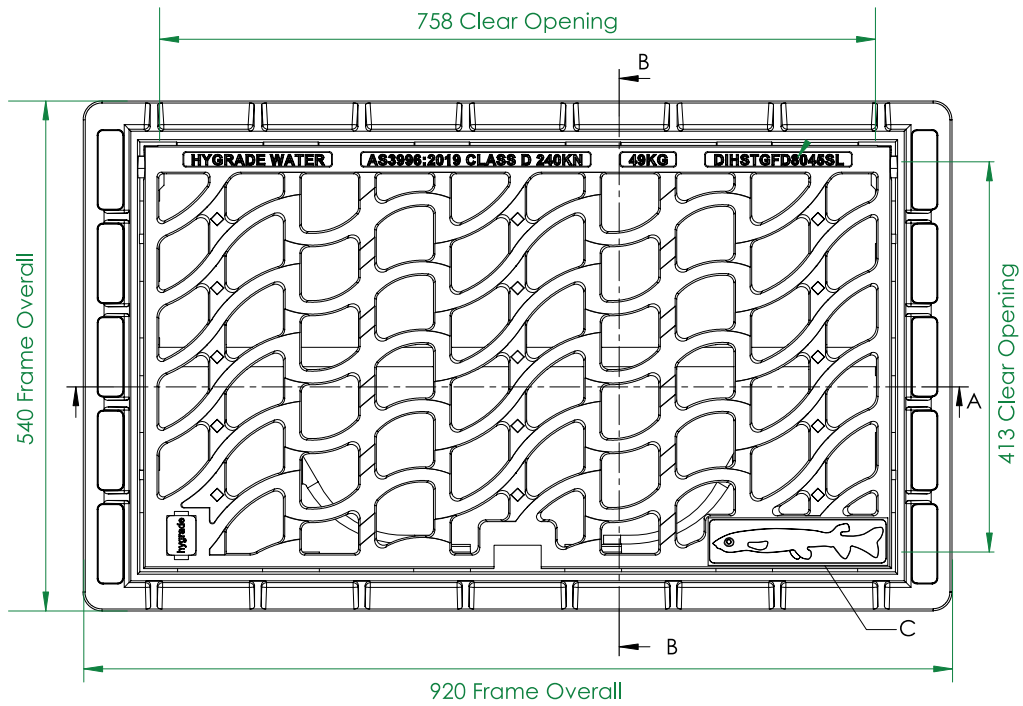


FIG. 1 Estimation Method: Orifice Flow Condition

## Flow Rate Estimate (DIHSTGFDSL)



# Dimensions and Flow Rates for DIHSTGFD8045SL



## Flow Rate Estimate (NZH40671-01)

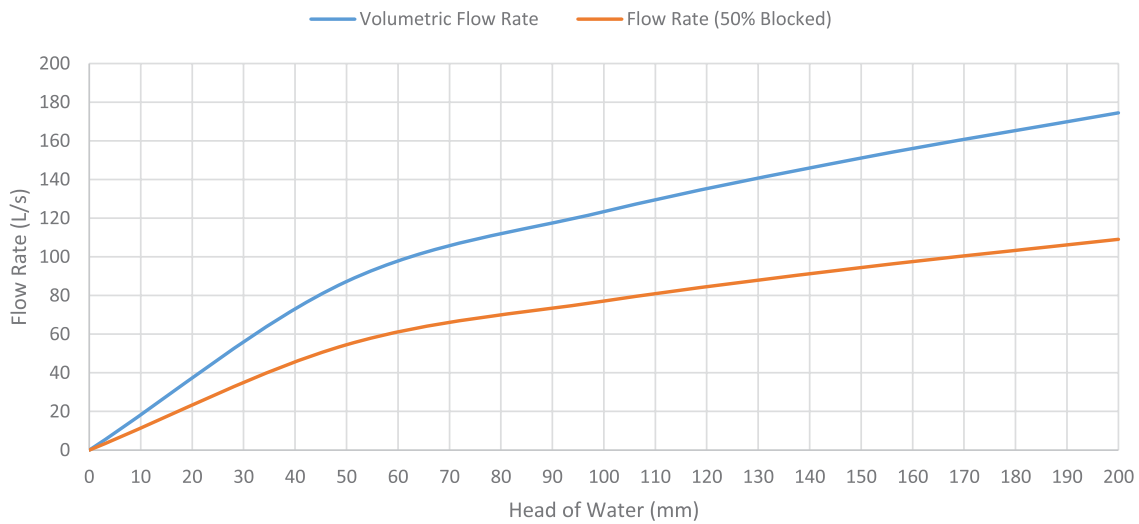


FIG. 2 Flow rate for 800 x 450

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**Disclaimer:** While every effort has been made to ensure that the information in this document is correct and accurate, users of Hynds product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hynds unless expressly stated in any sale and purchase agreement entered into between Hynds and the user.