

SPECIFICATION INFORMATION

HYDRO DRAIN- CAST IRON EDGE RAIL POLYMER CONCRETE CHANNEL WITH DUCTILE IRON HI-FLOW GRATE WITH PROFIX LOCKING MECHANISM



GRATE FEATURES

1. Large grate holes maximises water intake and minimises ponding.
2. Fast removal of water from road surfaces.
3. Manufactured from durable Ductile Iron.
4. Includes KTL Coating which is a finished technological process used for the coating of metal surfaces with a thin, solid, one layer corrosion resistant paint.
5. Certified to AS3996 Load Class D.
6. Includes anti-shunt lugs which prevents longitudinal movement.
7. MEA Profix integrated locking system ensures grate cannot move once installation in channel completed.
8. Compatible with Hydro Drain Supreme C2000 and C3000 Channels.
9. AMA Motorway (NZ) approval (see page 4).

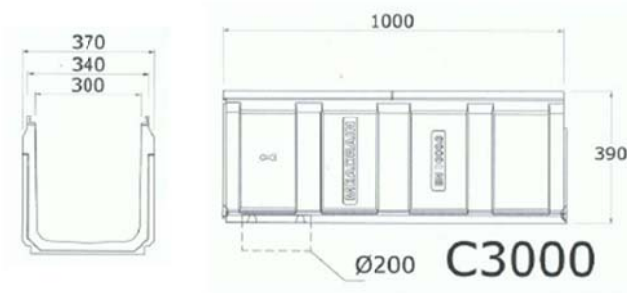


APPLICATION TYPES

- Car Parks
- Urban Roads sections
- Highway and Motorway areas
- Distribution Centres
- Bus and Truck Stops

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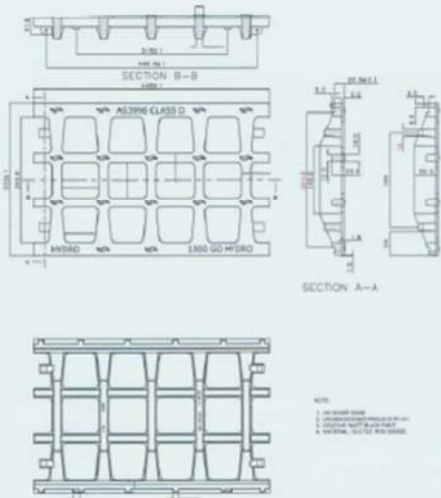
HYDRO DRAIN SUPREME C3000



Weight: 113kgs



MEA HI-FLOW CAPACITY CLASS D GRATE



Channel unit

- o Polymer concrete: based on polyester resin, with natural minerals
- o Compression resistance: $\geq 90 \text{ N/mm}^2$
- o Flexural tensile strength: $\geq 22 \text{ N/mm}^2$
- o Modules of elasticity: 25000 - 35000 N/mm²
- o Density: 2,1 - 2,3 kg/dm³
- o Linear expansion coefficient: ca. $1,45 \times 10^{-5} \text{ 1/K}$
- o Heat resistance: 100°C permanent exposure, short-term exposure (5 min.) to 200°C
- o Frost resistance: - 50°C
- o Water penetration level: 0 mm
- o Water absorption: < 0,05%
- o Material structure: capillary free

Edge Protection

- o Ductile Iron

Grate Covers

- o Ductile Iron
- o Profix Locking System

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LOCKING MECHANISM



Detailed view – PROFIX locking system

Profix Locking System

For everyone who likes easy, fast and convenient installation. PROFIX – it's the choice of professionals! Place the grate in the channel body – press in – finished. The grating locks into position by itself through its 4-point spring-steel locking system. For removal simply use a screwdriver and lever the grate out.

PROFIX has no moving parts and also guarantees long-term functionality under extreme conditions. The grate has been designed to snap securely into the edge of the channel. What's more, integral lugs prevent any lengthwise movement of the grating.

PRODUCTS AVAILABLE	PART NO.	LENGTH	WIDTH	HEIGHT
200mm Clear Opening Ductile Iron Hi Flow Grate with Profix locking system (Load Class D)	723200	500	223	21
300mm Clear Opening Ductile Iron Hi Flow Grate with Profix system Grate (Load Class D)	723300	500	323	21

Please note all above measurements are in millimetres. The 200mm Clear Opening Ductile Iron Hi Flow Grate with Profix System (723200) is compatible with the following MEA Channel Systems-LC2000, C2000. The 300mm Clear Opening Ductile Iron Hi Flow Grate with Profix System (723300) is compatible with the following MEA Channel Systems- C3000.

Auckland Motorways NZ Approval

**Stormwater – Grated Trench Drains – Global Brand Improvement
MEA® DRAIN - HiFlow Single Pin Profix System**

Opportunity:

Grated trench drains help to manage surface flooding. Nationally and internationally a range of grated trench drainage systems are available. A range of 'varieties' exist at the AMA Motorway Network. Traditional grated trench drainage systems present a range of risks including:

- Safety risk of flying objects if grate becomes dislodged.
- Small grate apertures are susceptible to blockage causing flooding.
- Pavement overlays that can damage slot drains.
- Poor robustness against pavement milling operations.
- Fine tolerance fastenings mean additional parts and special tools required for operation. Small/fiddly bits are not desirable during night works under traffic control in dirty conditions.

Solution:

Positive engagement and collaboration between the AMA and globally reputable brand MEA for a new fastening system (single pin self-locking) for a grated trench drain product that is now suitable for motorways and heavily trafficked and constrained environments, the MEA-HIFLOW-Single Pin Profix system (200D and 300D) - Class D.

Estimated Results:

- Improved reliability and function of hydraulic performance with much larger aperture slots being less susceptible to blockage and flooding
- Improved safety for motorists and operators having a robust, reliable and simple single pin 'profix' fastening mechanism for the grate
- No special tools or special parts are required for operations
- Quick and easy to install and to operate
- Costs – Price tensioning by competition for cheaper outcomes

Contributors:

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KRA	Increase
Maximise Efficiency	Yes
Customer focus	Yes
Positive Legacy	Yes
Value for Money	Yes
Healthy Organization	Yes

New Zealand Government