

Approvals



Flow Rates

The size and quantity of floor drain grate assemblies required can be decided with the assistance of the Flow Capacity Chart below. The given flow capacity of each grate assembly was determined during tests conducted by the Water Corporation of Western Australia.

These flow capacity figures are based on the grate assembly only, draining to atmosphere with no restrictions. The actual flow capacity may be reduced due to possible restrictions, such as main body size and design, drain pipe size, strainers, sediment baskets, debris, etc.

Table 1 - Floor Drain Flow Capacity (Litres/Second)

Grate Type	Pressure Head mm of water		
	20mm	30mm	40mm
Round 100 Dia	0.9	1.2	1.5
Round 150 Dia	2.1	2.8	3.5
Round 200 Dia	3.7	4.8	6.7
Round 300 Dia	4.7	9.1	12.2
Vinyl 100 Dia	0.9	1.2	1.5
Vinyl 150 Dia	2.1	2.8	3.5
Vinyl 200 Dia	3.7	4.8	6.7
Square 100 x 100	1.1	1.4	1.5
Square 150 x 150	3.1	3.7	4.1
Square 200 x 200	3.9	6.4	7.4
Square 300 x 300	4.7	9.1	13.9

Table 2 - Roof Drain Flow Capacity (Litres/Second)

Grate Type	Inlet Size	Outlet Size	Pressure Head mm of water			
			20mm	30mm	40mm	50mm
Flat Non Clamp Ring	245	100	2.4	5.6	6.3	6.7
Flat Non Clamp Ring	245	150	3.9	6.9	9.6	10.5
Flat Clamp Ring	245	100	3.1	5.6	6.2	6.5
Flat Clamp Ring	245	150	4.9	7.4	10.0	10.9
Domed Clamp Ring	223	100	1.7	3.3	5.0	6.3
Domed Clamp Ring	223	150	2.3	4.2	5.7	8.0

Load Ratings

Floor loadings should always be considered, however, with Red Emperor floor drain grate assemblies & cleanouts the selection of the class of grate or cleanout is made simple. All grate assemblies and cleanouts have been classified as a minimum of Class B for 100mm opening and Class C for 150mm and above during tests to the requirements of AS 3996 (BS497 Part 1):
 Class 'B' - for areas (including footways and light vehicle paths) accessible to vehicles (excluding commercial vehicles) or livestock (light duty), with a nominal wheel loading up to 2,670kg.
 Class 'C' - malls and areas open to slow moving commercial vehicles with a normal wheel loading up to 5,000kg.

Applications

- Hospitals
- Hotels
- Commercial Kitchens
- Universities
- Mental Health Facilities
- Multi-Storey Carparks
- Shopping Centres
- Apartments
- Prisons
- Schools
- Stadiums
- Balconies

... "safe cell grates, vandal resistant showers and roof outlets have been specified and installed at the 900 bed, Metropolitan Remand and Reception Centre Silverwater the 200 cells at Mount Penang Juvenile Justice Centre. These products were selected for high quality and unique design. We will continue to use Galvin Engineering manufactured products in future"...

Greg Napper,
Connell Wagner Engineering Consultants
Sydney (NSW)

... "We have specified Galvin Engineering floor drains, wastes and cleanouts on a number of projects such as The Conservatory on Hindmarsh and the Leabrook Retirement Village... range of products have proven versatile for use in differing floor finishes, from tiled areas to vinyl to concrete... no hesitation in recommendation or specifying the range of Galvin Engineering"...

Andrew Shinnick,
Lucid Consulting Engineers
Adelaide (SA)

Whilst all reasonable care has been taken in compiling the information in this document, the designs, dimensions and products shown are indicative only and should not be relied upon without our prior approval. Due to our policy of continuous development, we reserve the right to alter any details of specifications or products without notice. All information, drawings, technical specifications and product designs remains the property of Galvin Engineering Pty Ltd.

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beautifully designed
Commercial Drainage



Stainless Steel HeelGrate® Floor Drains

- Suitable for vinyl, tiled, paved and concrete floors.
- Ideal for internal and external applications.
- 5mm gaps between bars minimises the risk of high heels, tips of crutches or small childrens toes and fingers becoming lodged in the drain.
- Stainless steel construction.
- Load rated to a minimum of Class B.
- Slip-in or screwed outlets.

Stainless Steel Basket Arrestors

- Suitable for vinyl, tiled, paved and concrete floors.
- Ideal for commercial kitchen and food preparation applications.
- Stainless steel grates and strainer baskets.
- Available with single or dual strainer buckets.
- Load rated to a minimum of Class C.
- Slip-in or slip-on outlets.

Stainless Steel Standard Floor Drains

- Suitable for vinyl, tiled, paved and concrete floors.
- Vinyl versions include a vinyl clamping system to secure the vinyl flooring inside the drain.
- Ideal for internal and external applications.
- Stainless steel construction.
- Load rated to a minimum of Class B.
- Slip-in or screwed outlets.

Stainless Steel Safe-Cell® Prison Drains

- Suitable for vinyl, tiled, and concrete floors.
- Designed to reduce the risk of suicide, self harm and the hiding of contraband.
- Ideal for mental health facilities, custodial facilities, prisons and holding cells.
- Unique dual ring design to maximise drainage.
- Stainless steel construction.
- BSP threaded screwed outlets.
- Can be matched with suitable cast iron body for water proofing or adaptor for height adjustment flexibility.

Stainless Steel Slip-Safe® Cleanouts

- Suitable for vinyl, tiled, paved and concrete floors.
- Slip-Safe® design to reduce the risk of serious injuries caused by slipping.
- Stainless steel construction.
- Load rated to a minimum of Class B.
- Slip-in or screwed outlets.

Cast Iron Rainwater Outlets & Roof Drains

- Large open areas to allow maximum flow.
- Positive flashing clamp.
- Seepage control channels.
- Removable domed or flat grates.
- Multiple connection variations to suit most piping systems.
- Corrosion resistant coated cast iron grates.
- Effective debris protection and gravel stop.