

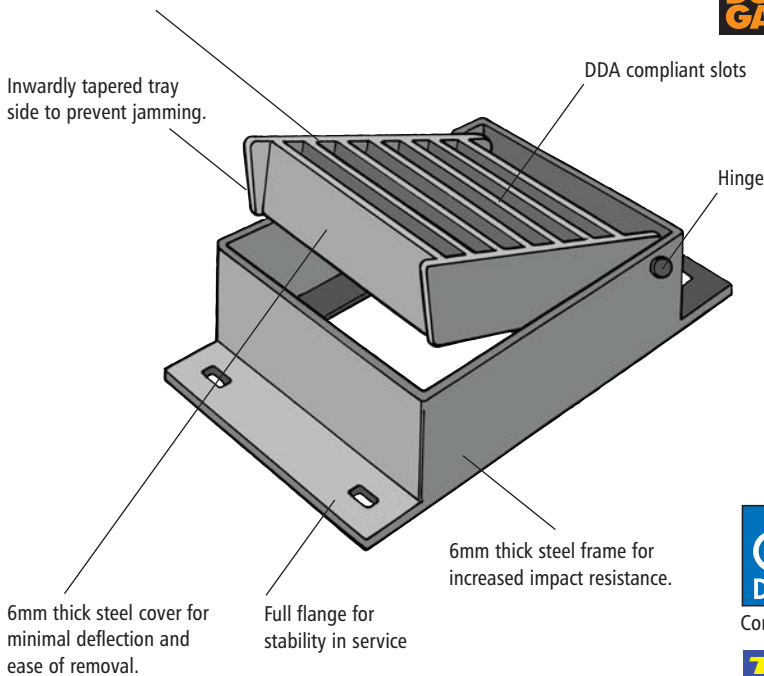
AQUADRAIN

SLOTTED HINGED FLUSH GRATING FOR BLOCK PAVIORS

DSB I

Aquadrain units are post galvanised in excess of BS EN 1461. Post Galvanised coating thickness is available in 3 grades of finish to suit the specific project geographical location. Aquadrain units should be designed to cater for their intended application and should last the life of the project.

See chart on page 105 for the various grades of corrosion protection required to meet the designers obligations on Whole Life Costing for the project.



Compliant products



Jones of Oswestry provides RIBA approved CPD support for designers and architects in the subject of true sustainable design.

For further details email marketingsupport@jonesofoswestry.com

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GENERAL TECHNICAL DETAIL, COMPOSITION AND MANUFACTURE

APPLICATION

- Point drainage gratings within pedestrianised areas where aesthetics are not important
- Public domain therefore trip and slip measures important
 - Single person operation for maintenance (subject to size)
 - DDA compliance is a design minimum

GENERAL

Aquadrain fabricated hinged drainage gratings and frames are manufactured specifically to provide point drainage within a hard landscape area .

The Aquadrain drainage grating system is available in a range of sizes to suit specific site requirements and frame depths to suit specific surrounding finishes with their respective bedding.

MECHANICS, PERFORMANCE

In order to ensure the gratings continue to perform for their design life all Aquadrain units are available in a range of load classifications as listed overleaf.

Jones deflection criteria ensures that the amount of deflection when subject to serviceability loading is limited , and hence greatly reducing the risk of damaged gratings.

Damaged pavement metalwork can lead to complaints from the general public and constitutes a large part of injury claims on local authorities from slip and trip.

All drainage slots are DDA compliant and provide a minimum number of slot rows to guard against surface water "run-over" in times of high rainfall.

Multiple slots also increase the hydraulic capacity or the units in service due to increased drainage slot area.

COMPOSITION AND MANUFACTURE

Gratings are full welded fabrications using a minimum of 4mm thick structural steel plate. Frame units include heavy duty 'L' section format to 2 sides of the unit Pierced anchor points together with a full width seating ensures that any load is transmitted back to supports with less risk of localised failure in the bedding material.




DIMENSION TABLE

Overall top of frame	Overall base of frame	Clear openings	N.B. The sizes relate to 200 x 100 module, any size can be accommodated within the design. For a product code that suits the specific pavior, contact: techadvice@jonesofswestry.com
200 x 200	300 x 200	192 x 132	
300 x 200	400 x 200	292 x 132	
400 x 200	500 x 200	392 x 132	
500 x 200	600 x 200	492 x 132	
600 x 200	700 x 200	592 x 132	

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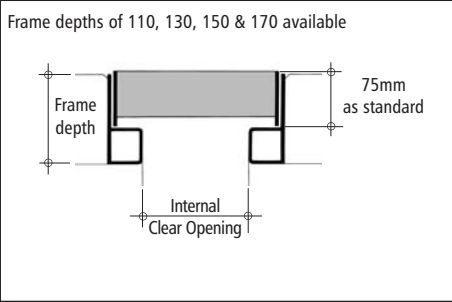
LOADING TABLES AND SECTIONAL PROPERTIES

EUROPEAN STANDARD FOR ACCESS COVERS

LOAD CLASSES	TEST LOAD	SUGGESTED AREAS OF USAGE	SPECIFYING CODE
A15 	15kN (1.5 Tonne)	Pedestrian and Cycle Areas	/A
		Recommended S.M.W.L. Not exceeding 1 Tonne	
B125 	125kN (12.5 Tonne)	Pavement, Pedestrian Zones, Car Parks & Verges	/B
		Recommended S.M.W.L. Not exceeding 6 Tonne	
C250 	250kN (25 Tonne)	Slow moving occasionally trafficked areas i.e Service Roads, Vehicular Access Areas, Parking Areas etc.	/C
		Recommended S.M.W.L. Not exceeding 11.5 Tonne	
D400	400kN	Contact our technical support team for advice on fast moving and/or exceptionally heavy vehicled areas.	/SD
E600	600kN		/SE
F900	900kN		/SF

ALTHOUGH NOT COMPLYING WITH BS EN 124, OTHER INTERMEDIATE LOAD CLASSES ARE AVAILABLE, CONSULT OUR TECHNICAL DEPARTMENT

SECTIONAL DETAILS



ACCESSORY SUFFIXES

To specify add the following suffixes to the professional specification code

- B4 - Locking bolts.
- X - Grade 304 Stainless Steel Construction
- Y - Grade 316 Stainless Steel Construction

DIMENSIONS

Installation dimensions, based around metric block sizes and overall outside frame dimensions are as tabulated although Aquadrain units are manufactured to complement the precise shape of the chosen gully blocks.

Grating depths vary to suit load and span. Frame depths vary to suit surrounding paviers and their respective bedding thicknesses.

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AQUADRAIN

DSB I • REFERENCE CODE

FINISHES

How to use the Longevity Table

1. Locate your site on the Millennium map (E.g. Leeds - West Yorkshire)
2. Match the corrosion category square colour to the key (Leeds = 3 light blue)
3. Read down from Product Design Life to establish required minimum life i.e. 25 years.
4. Once minimum Product Design Life has been established, (20,25 or 30 years) cross reference with your site location category (1,2,3,4 or 5) to determine your required Duragalv finish. (Duragalv 100)
5. At the end of the specifying code DG100 needs to be added.

Coating suffix specifying codes:

- Duragalv70 = DG70
- Duragalv100 = DG100
- Duragalv140 = DG140

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Fabricated mild steel products, Hot-Dip Galvanised after manufacture = GALVANISED LONGEVITY TABLE					
Rate of corrosion of zinc (in microns per annum).	2.5	3	3.5	4	4.5
See Millennium Map for your site location or visit www.hdg.org.uk/map/index.htm	1	2	3	4	5
PRODUCT DESIGN LIFE					
20 YEARS Generally less than the normal minimum design life for product in public domain - UNACCEPTABLE WHOLE LIFE COSTING RETURN PERIOD	DURAGALV 70	DURAGALV 70	DURAGALV 70	DURAGALV 100	DURAGALV 100
25 YEARS Normal minimum design life for product in public domain - ACCEPTABLE WHOLE LIFE COSTING RETURN PERIOD	DURAGALV 70	DURAGALV 100	DURAGALV 100	DURAGALV 100	DURAGALV 140
30 YEARS Enhanced design life for product in public domain - PREFERRED WHOLE LIFE COSTING RETURN PERIOD	DURAGALV 100	DURAGALV 100	DURAGALV 140	DURAGALV 140	DURAGALV 140

Jones of Oswestry provide an extensive on-line support service. Simply attach your drawings or list your queries to techadvice@jonesofoswestry.com and one of our engineers will guide you to the most suitable solution.

HOW TO SPECIFY

PROGRESSIONAL EXAMPLE FOR SPECIFYING						
Ref DESCRIPTION	PRODUCT TYPE	CLEAR OPENING	LOAD CLASS	INTERNAL DEPTH OF TRAY	ACCESSORY SUFFIX	FINISHED COATING
DETAIL	(AQUA DRAIN)	(293mm x 132mm)	(B125)	(65mm)	(LOCKING DOWN BOLTS)	(SEE LONGEVITY TABLE)
PRODUCT Ref	DSB 1	29-13	B	65	B4	DG100
THE ABOVE EQUALS FULL SPECIFYING CODE OF = DSB1/29-13/B/65/B4/DG100						

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JONES

OF OSWESTRY

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