

Product Data Sheet

ALUMINIUM ROOF & BALCONY RAINWATER OUTLETS

Accessories

The Aluminium Roof and Balcony Rainwater Outlets offer a variety of drainage solutions for a wide range of Axter waterproofing membranes and roof build-ups.

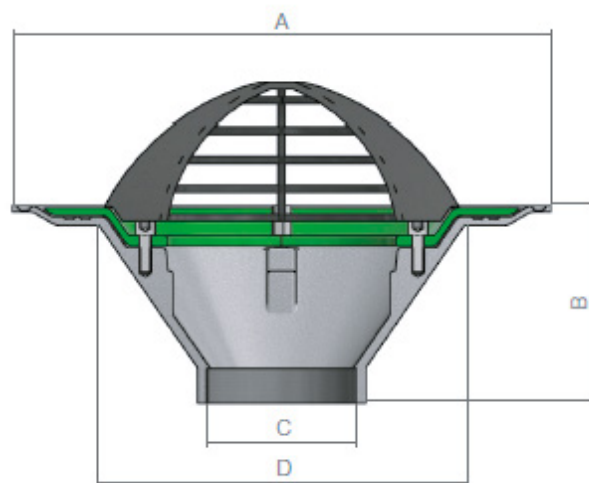
The Aluminium Roof and Balcony Rainwater Outlets are compatible with all types of Axter waterproofing systems including reinforced bituminous, hot melt, single ply and cold applied liquid waterproofing membranes to cover a range of applications such as new build, refurbishment, warm and inverted build-ups, terraces, balconies etc.

Key benefits

- The waterproofing membrane is secured to the outlet by a compression clamp combined with a butyl sealing ring giving a durable, watertight seal.
- Manufactured from marine grade aluminium to give a life expectancy of at least 50 years.
- Rigorously tested to withstand water depths greater than 1m.
- The outlets incorporate PVCu pipe connectors, providing an air tight seal and thermal break between the outlet body and connecting pipework.
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- Outlets connect to all common PVCu, HDPE and socketless cast iron pipework sizes.
- Balcony outlets connect to aluminium (76mmØ & 72x72mm), PVCu (82mmØ & 110mmØ) and socketless cast iron (70mmØ & 100mmØ) pipework.
- The threaded PVCu pipe connectors are manufactured from BS EN 1329 pipework and are therefore suitable for use with pipe wraps and fire collars.
- Manufactured to and in excess of the relevant BS or EN Standards.

Aluminium Rainwater Outlets With dome leafguard

Primarily suited for use with warm roof and cold roof build-ups.



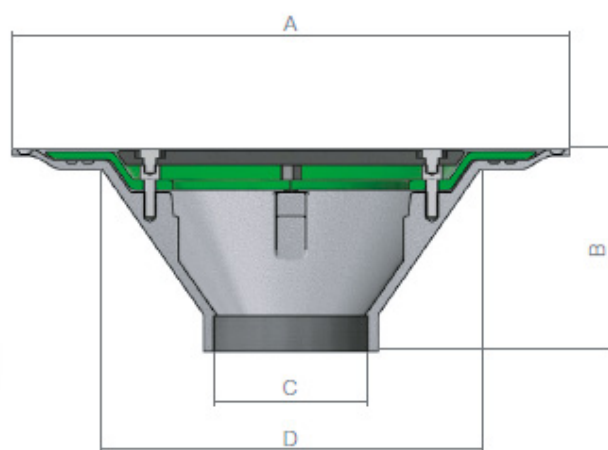
Product code	Pipe connection size (O.D.)	A (mm)	B (mm)	C (mm)	D (mm)	Max. flow rate (l/s)
AROD/82	82mmØ	377	111	82	255	5
AROD/110	110mmØ	377	136	110	255	10.7
AROD/160	160mmØ	377	111	160	255	19

Flow rates are measured at 35mm head of water for outlets up to 110mmØ and 45mm head of water for 160mmØ outlets, in accordance with BS EN 1253-2.

Units are supplied with 500mm long threaded PVCu pipe connectors

Aluminium Rainwater Outlets With flat leafguard / car park outlet

Primarily suited for use with asphalt build-ups.



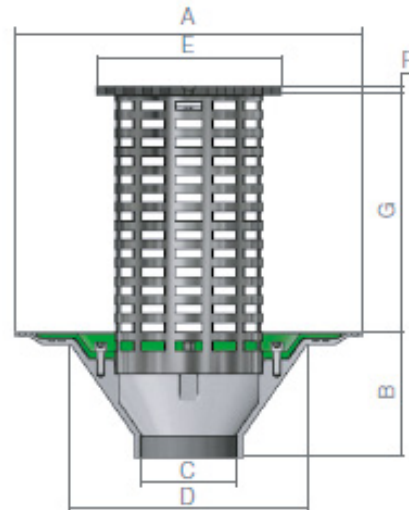
Product code	Pipe connection size (O.D.)	A (mm)	B (mm)	C (mm)	D (mm)	Max. flow rate (l/s)
AROF/82	82mmØ	377	111	82	255	5
AROF/110	110mmØ	377	136	110	255	10.7
AROF/160	160mmØ	377	111	160	255	19

Load rating 1.5 tonnes, class K.

Aluminium Rainwater Outlets

With extended leafguard

Primarily suited for use with inverted roofs, living roofs, terraces, podiums, walkways and paved areas.



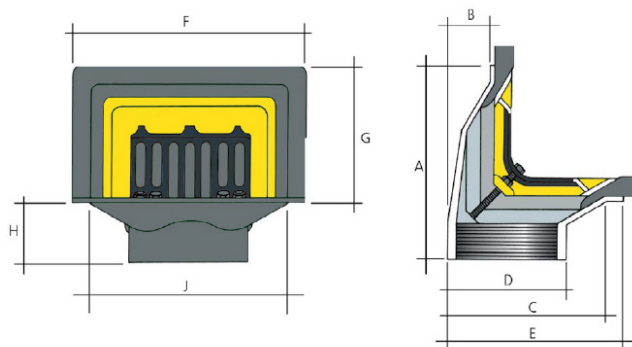
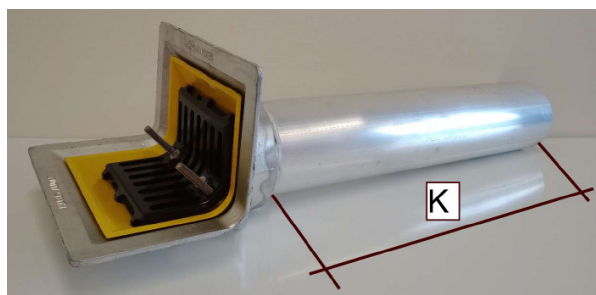
Product code	Pipe connection size (O.D.)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G Max. (cut down to requirement)	Max. flow rate (l/s)
AROE/82	82mmØ	377	111	82	255	200	10	255	5
AROE/110	110mmØ	377	136	110	255	200	10	255	10.7
AROE/160	160mmØ	377	111	160	255	200	10	255	19

Flow rates are measured at 35mm head of water for outlets up to 110mmØ and 45mm head of water for 160mmØ outlets, in accordance with BS EN 1253-2.

Units are supplied with 500mm long threaded PVCu pipe connectors

Aluminium Two-Way Parapet Outlets With leafguard

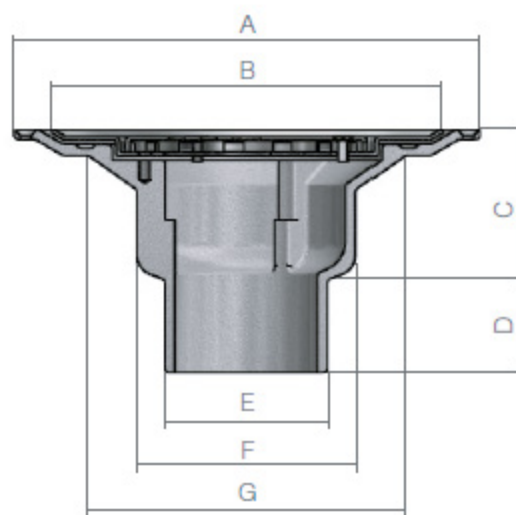
Primarily suited for use with parapet wall penetrations and internal gutters. Outlet can be set horizontal or vertical.



Product code	Connect size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (mm)
ATWPO-110-600	110	213	50	170	110	193	255	148	70	217	600
ATWPO-110-1000	110	213	50	170	110	193	255	148	70	217	1000

Aluminium Balcony Outlets With flat leafguard

Primarily suited for use with uninsulated balconies/ walkways and terraces.



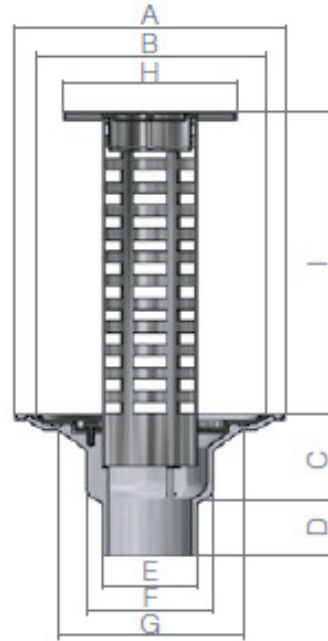
Product code	Pipe connection size (O.D.)	A	B	C	D	E	F	G	Max. flow rate (l/s)
ABOF/82	76, 72x72, 82 and 110mm	234	196	77	45	82	110	158	4.7

* Flow rate measured at 35mm head of water.

Aluminium Balcony Outlets

With terrace leafguard

Primarily suited for use with inverted podiums, decked and paved balconies/ walkways.



Product code	Pipe connection size (O.D.)	A	B	C	D	E	F	G	H	I (cut down to requirement)	Max. flow rate (l/s)
ABOF/82	76, 72x72, 82 and 110mm	234	196	77	45	82	110	158	150	260	4.7

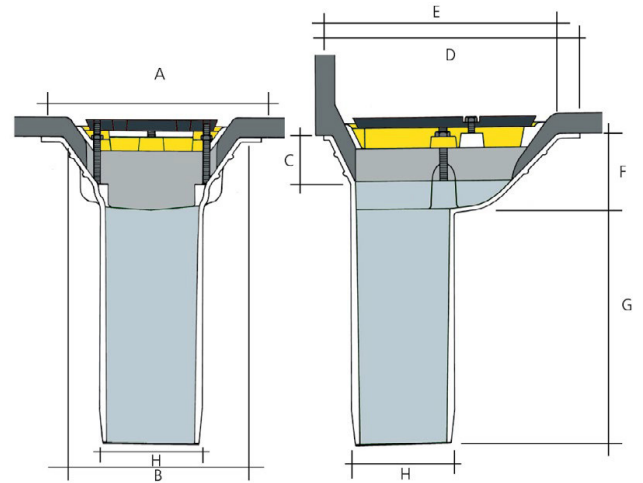
* Flow rate measured at 35mm head of water.

Connection to aluminium pipework

Each balcony outlet is supplied with an EPDM rubber adaptor that allows direct connection to 76mmØ and 72x72mm aluminium pipework.

Aluminium 'D' Balcony Outlets With flat leafguard

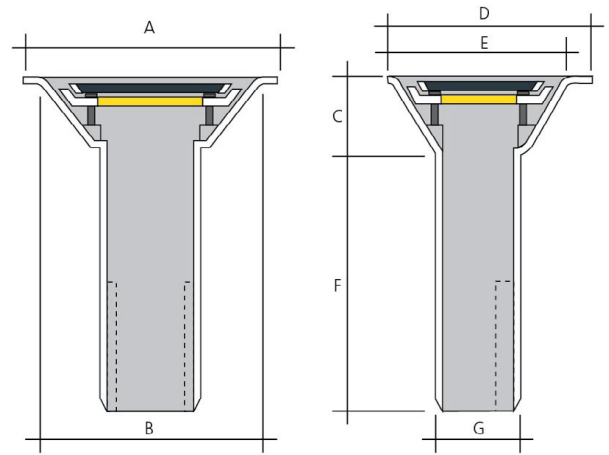
Balcony outlet primarily suited for use with reinforced bitumen membrane (RBM) and hot melt waterproofing systems.



Product code	Nominal Size (mm)	Pipe connection size (O.D.)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Max. flow rate (l/s)
ADBOF/82	75	82mm	230	190	50	265	240	85	260	83	5.0
ADBOF/110	100	110mm	230	190	50	265	240	85	260	110	7.55

Aluminium 'D' Shallow Balcony Outlets With flat leafguard

Shallow balcony outlet primarily suited for use with reinforced bitumen membrane (RBM) and hot melt waterproofing systems.



Product code	Nominal Size (mm)	Pipe connection size (O.D.)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Max. flow rate (l/s)
ADSBOF/82	75	82mm	215	172	55	172	152	220	83	5.77

Design and maintenance recommendations

Design

Roof drainage design

Axter Ltd's technical sales team will assist with the correct drainage design, specification of the correct product and a full set of drainage calculations. Please contact Axter Ltd on 01473 724056.

Rainwater outlet positioning

Outlets should be distributed as evenly as possible, throughout the roof areas, in order to accept an equal proportion of the rainwater runoff.

Emergency outlets/overflows

Overflows should be included within the design of all flat roofs and balconies with perimeter upstands greater than 50mm. Overflows indicate if there is a maintenance requirement and prevent structural overloading or rainwater over spilling into the building fabric.

Pipework

Our rainwater outlet maximum performance figures, in many cases, are restricted by the maximum allowed capacity of the connecting pipe system. If it is intended to link multiple roof outlets within a singular pipework run, the combined capacity of the outlets must not exceed the design capacity of the pipe system. Contact Axter Ltd for further assistance.

Balcony outlet pipework

To reduce the risk of a balcony outlet becoming overwhelmed in a storm event, it is good practice to connect each balcony outlet separately into a continuous main rainwater pipe drop, as opposed to draining balconies from above onto lower.

If a continuous main rainwater pipe drop is not an option, rainwater outlets and overflows need to be suitably sized to accept the total combined drainage from the above balconies at each level.

Installation

Full details are given in the Aluminium Rainwater Outlets and Leafguards Installation Guide, available from the Axter website.

Maintenance

All outlets should be clearly identifiable and accessible for maintenance. Outlet gratings should not be covered by pavers, decking, plant material, ballast etc.

For optimum performance, ensure roof outlets are inspected and cleaned every six months to ensure peak performance. Any build up of leaves or other debris must be removed from around the grate to maximise flow rate.

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