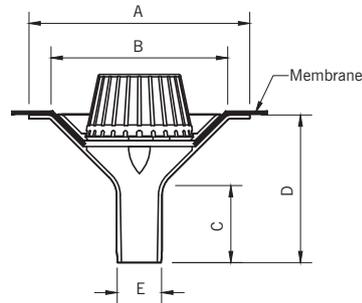


ACO HP Vertical Spigot Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m ²)	Flow rate† (l/s)	Weight (kg)
105900	50HP-D	50	60	82	1.7	2.50
105901	75HP-D	75	83	240	5.0	2.40
105902	100HP-D	100	110	514	10.7	3.10
105903	150HP-D	150	160	725	15.1	3.60

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105900	50HP-D	50	300	260	105	200	60
105901	75HP-D	75	300	260	110	200	83
105902	100HP-D	100	380	310	130	240	110
105903	150HP-D	150	380	310	160	240	160

Pipework connections

Vertical spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75HP-D, 100HP-D and 150HP-D outlets only).
- Connection to 50HP-D outlets via pipe couplings or heat shrink socket.

Specification clause

The rainwater outlets 50HP-D/75HP-D/100HP-D/150HP-D* are to be ACO Building Drainage HP vertical spigot outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

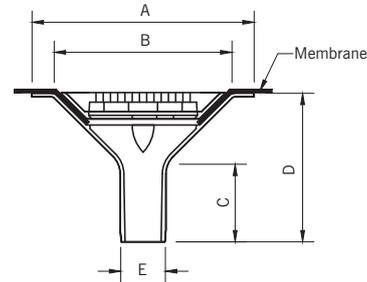
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP Vertical Spigot Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105904	50HP-F	50	60	82	1.7	2.80
105905	75HP-F	75	83	240	5.0	2.70
105906	100HP-F	100	110	514	10.7	3.80
105907	150HP-F	150	160	787	16.4	4.20

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105904	50HP-F	50	300	260	105	200	60
105905	75HP-F	75	300	260	110	200	83
105906	100HP-F	100	380	310	130	240	110
105907	150HP-F	150	380	310	160	240	160

Pipework connections

Vertical spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75HP-F, 100HP-F and 150HP-F outlets only).
- Connection to 50HP-F outlets via pipe couplings or heat shrink socket.

Specification clause

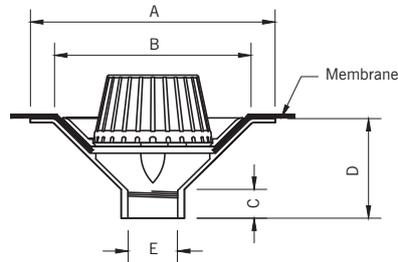
The rainwater outlets 50HP-F/75HP-F/100HP-F/150HP-F* are to be ACO Building Drainage HP vertical spigot outlets with locked flat grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP Vertical Screw Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105908	50HP-TD	50	82	1.7	2.20
105909	75HP-TD	75	240	5.0	2.30
105910	100HP-TD	100	514	10.7	3.00
105911	150HP-TD	150	730	15.2	3.10

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105908	50HP-TD	50	300	260	45	125	2" BSP
105909	75HP-TD	75	300	260	45	125	3" BSP
105910	100HP-TD	100	380	310	45	135	4" BSP
105911	150HP-TD	150	380	310	45	115	6" BSP

See Page 27 for ABS threaded adaptors

Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

The rainwater outlets 50HP-TD/75HP-TD/100HP-TD/150HP-TD* are to be ACO Building Drainage HP vertical threaded outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

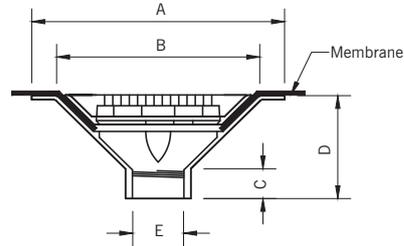
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP Vertical Screw Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105912	50HP-TF	50	82	1.7	2.50
105913	75HP-TF	75	240	5.0	2.50
105914	100HP-TF	100	514	10.7	3.70
105915	150HP-TF	150	736	15.9	3.80

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105912	50HP-TF	50	300	260	45	125	2" BSP
105913	75HP-TF	75	300	260	45	125	3" BSP
105914	100HP-TF	100	380	310	45	135	4" BSP
105915	150HP-TF	150	380	310	45	115	6" BSP

See Page 27 for ABS threaded adaptors



Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

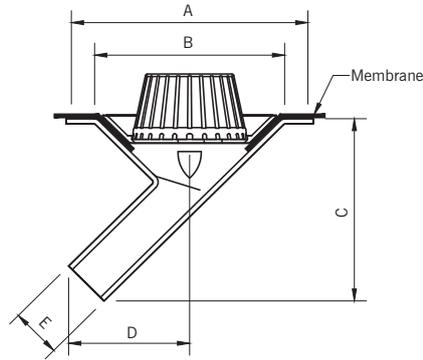
The rainwater outlets 50HP-TF/75HP-TF/100HP-TF/150HP-TF* are to be ACO Building Drainage HP vertical threaded outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP 45° Spigot Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m ²)	Flow Rate† (l/s)	Weight (kg)
105916	50/45HP-D	50	60	82	1.7	2.90
105917	75/45HP-D	75	83	240	5.0	3.50
105918	100/45HP-D	100	110	422	8.8	5.00

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105916	50/45HP-D	50	300	260	245	135	60
105917	75/45HP-D	75	300	260	260	160	83
105918	100/45HP-D	100	380	310	275	200	110

Pipework connections

45° spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75/45HP-D, and 100/45HP-D outlets only).
- Connection to 50/45HP-D outlets via pipe couplings or heat shrink socket.

Specification clause

The rainwater outlets 50/45HP-D/75/45HP-D/100/45HP-D* are to be ACO Building Drainage HP 45° spigot outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

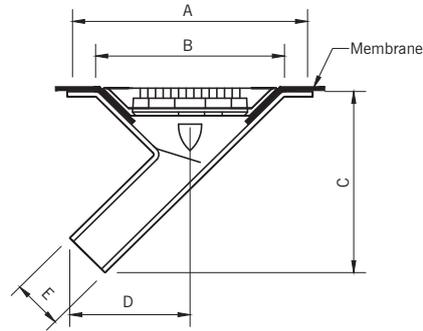
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP 45° Spigot Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105919	50/45HP-F	50	60	82	1.7	3.60
105920	75/45HP-F	75	83	240	5.0	4.00
105921	100/45HP-F	100	110	494	10.3	6.20

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105919	50/45HP-F	50	300	260	245	135	60
105920	75/45HP-F	75	300	260	260	160	83
105921	100/45HP-F	100	380	310	275	200	110



Pipework connections

45° spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75/45HP-F and 100/45HP-F outlets only).
- Connection to 50/45HP-F outlets via pipe couplings or heat shrink socket.

Specification clause

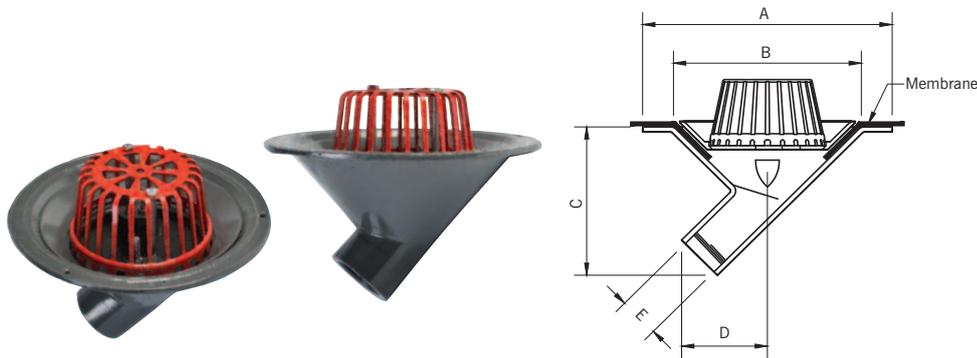
The rainwater outlets 50/45HP-F/75/45HP-F/100/45HP-F* are to be ACO Building Drainage HP 45° spigot outlets with locked flat grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP 45° Screw Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105922	50/45HP-TD	50	82	1.7	3.10
105923	75/45HP-TD	75	240	5.0	2.60
105924	100/45HP-TD	100	418	8.7	4.40

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105922	50/45HP-TD	50	300	260	190	80	2" BSP
105923	75/45HP-TD	75	300	260	200	120	3" BSP
105924	100/45HP-TD	100	380	310	210	145	4" BSP

See Page 27 for ABS threaded adaptors

Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

The rainwater outlets 50/45HP-TD/75/45HP-TD/100/45HP-TD* are to be ACO Building Drainage HP 45° threaded outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

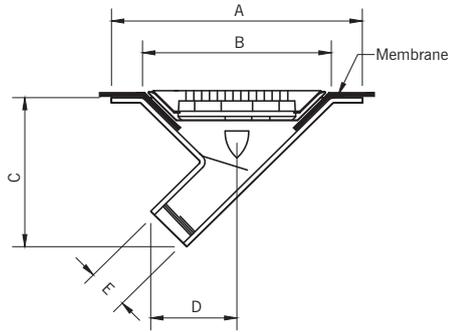
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP 45° Screw Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105925	50/45HP-TF	50	82	1.7	3.50
105926	75/45HP-TF	75	240	5.0	3.60
105927	100/45HP-TF	100	485	8.7	5.10

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105925	50/45HP-TF	50	300	260	190	80	2" BSP
105926	75/45HP-TF	75	300	260	200	120	3" BSP
105927	100/45HP-TF	100	380	310	210	145	4" BSP

See Page 27 for ABS threaded adaptors



Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

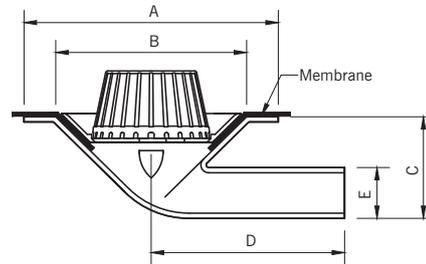
The rainwater outlets 50/45HP-TF/75/45HP-TF/100/45HP-TF* are to be ACO Building Drainage HP 45° threaded outlets with locked flat grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP 90° Spigot Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m ²)	Flow Rate† (l/s)	Weight (kg)
105928	50/90HP-D	50	60	82	1.7	3.00
105929	75/90HP-D	75	83	240	5.0	3.00
105930	100/90HP-D	100	110	346	7.2	5.10

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105928	50/90HP-D	50	300	260	130	230	60
105929	75/90HP-D	75	300	260	130	230	83
105930	100/90HP-D	100	380	310	160	290	110

Pipework connections

90° spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75/90HP-D and 100/90HP-D outlets only).
- Connection to 50/90HP-D outlets via pipe couplings or heat shrink socket.

Specification clause

The rainwater outlets 50/90HP-D/75/90HP-D/100/90HP-D* are to be ACO Building Drainage HP 90° spigot outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

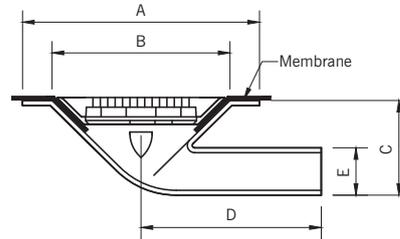
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010..

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP 90° Spigot Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105931	50/90HP-F	50	60	82	1.7	3.30
105932	75/90HP-F	75	83	192	4.0	3.40
105933	100/90HP-F	100	110	398	8.3	6.00

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105931	50/90HP-F	50	300	260	130	230	60
105932	75/90HP-F	75	300	260	130	230	83
105933	100/90HP-F	100	380	310	160	290	110



Pipework connections

90° spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75/90HP-F and 100/90HP-F outlets only).
- Connection to 50/90HP-F outlets via pipe couplings or heat shrink socket.

Specification clause

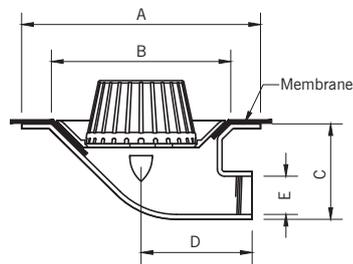
The rainwater outlets 50/90HP-F/75/90HP-F/100/90HP-F* are to be ACO Building Drainage HP 90° spigot outlets with locked flat grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP 90° Screw Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m ²)	Flow Rate† (l/s)	Weight (kg)
105934	50/90HP-TD	50	82	1.7	2.90
105935	75/90HP-TD	75	182	3.8	2.90
105936	100/90HP-TD	100	341	7.1	4.70
105937	150/90HP-TD	150	507	10.6	4.90

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105934	50/90HP-TD	50	300	260	130	160	2" BSP
105935	75/90HP-TD	75	300	260	130	160	3" BSP
105936	100/90HP-TD	100	380	310	170	190	4" BSP
105937	150/90HP-TD	150	380	310	215	140	6" BSP

See Page 27 for ABS threaded adaptors

Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

The rainwater outlets 50/90 HP-TD/75/90HP-TD/100/90 HP-TD/150/90 HP-TD* are to be ACO Building Drainage HP 90° threaded outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

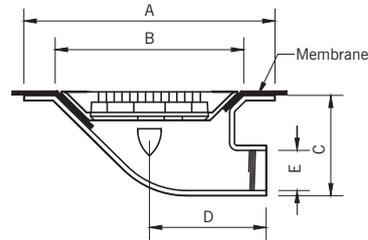
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP 90° Screw Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105938	50/90HP-TF	50	82	1.7	3.30
105939	75/90HP-TF	75	197	4.1	3.20
105940	100/90HP-TF	100	389	8.1	5.50
105941	150/90HP-TF	150	624	13.0	5.00

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)				
			A	B	C	D	E
105938	50/90HP-TF	50	300	260	130	160	2" BSP
105939	75/90HP-TF	75	300	260	130	160	3" BSP
105940	100/90HP-TF	100	380	310	170	190	4" BSP
105941	150/90HP-TF	150	380	310	215	140	6" BSP

See Page 27 for ABS threaded adaptors

Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

The rainwater outlets 50/90HP-TF/75/90HP-TF/100/90HP-TF/150/90HP-TF* are to be ACO Building Drainage HP 90° threaded outlets with locked flat grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

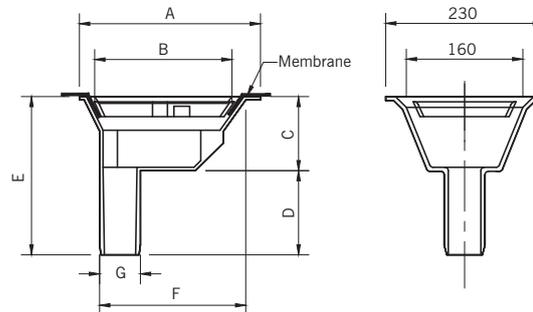
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP Balcony Spigot Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m ²)	Flow Rate† (l/s)	Weight (kg)
105942	50HP-BO	50	60	82	1.7	2.60
105943	75HP-BO	75	83	240	5.0	2.60
105944	100HP-BO	100	110	345	7.6	2.80

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)						
			A	B	C	D	E	F	G
105942	50HP-BO	50	265	205	90	125	215	210	60
105943	75HP-BO	75	265	205	90	125	215	210	83
105944	100HP-BO	100	265	205	90	125	215	210	110

Pipework connections

Vertical spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001 (for 75HP-BO and 100HP-BO outlets only).
- Connection to 50HP-BO outlets via pipe couplings or heat shrink socket.

Specification clause

The rainwater outlets 50HP-BO/75HP-BO/100HP-BO* are to be ACO Building Drainage HP vertical spigot outlets with locked flat grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

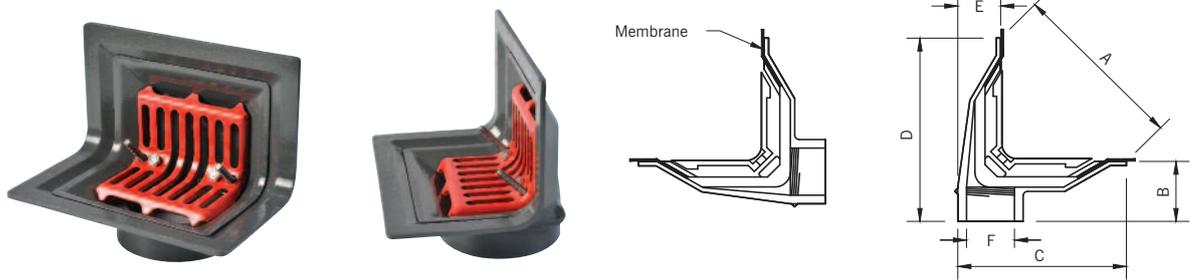
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP Two-Way Screw Outlet – Flat Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m ²)		Flow Rate† (l/s)		Weight (kg)
			Vertical Outflow	Horizontal Outflow	Vertical Outflow	Horizontal Outflow	
105945	50HP-TW	50	82	58	1.7	1.7	2.10
105946	75HP-TW	75	197	96	4.1	2.0	2.20
105947	100HP-TW	100	374	114	7.8	2.4	2.20

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)					
			A	B	C	D	E	F
105945	50HP-TW	50	202	70	193	213	50	2" BSP
105946	75HP-TW	75	202	70	193	213	50	3" BSP
105947	100HP-TW	100	202	70	193	213	50	4" BSP

See Page 27 for ABS threaded adaptors



Pipework connections

ACO threaded outlets are supplied with a parallel female screw thread to BS 21: 1985 for connection to tube conforming to BS EN 10255:2004 with male taper thread to BS 21:1985. This ensures a completely watertight seal when screwed fully home into the outlet body. Threaded outlets are recommended where connection to the outlet occurs within the thickness of the slab as threaded connections will form a completely gas-tight seal within the slab.

Specification clause

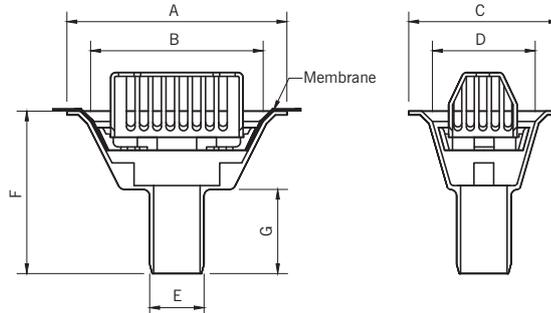
The rainwater outlets 50HP-TW/75HP-TW/100HP-TW* are to be ACO Building Drainage HP threaded outlets with locked grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP Gully Spigot Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Pipe OD (mm)	Area Drained‡ (m ²)	Flow Rate† (l/s)	Weight (kg)
105948	75HP-GO	75	80	240	5.0	3.10
105949	100HP-GO	100	110	514	10.7	3.40

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)						
			A	B	C	D	E	F	G
105948	75HP-GO	75	345	260	240	160	80	230	125
105949	100HP-GO	100	345	260	240	160	110	230	125

Pipework connections

Vertical spigot outlets may be directly connected to the following:

- Cast iron pipework to BS 416:1990 or BS EN 877 :1999.
- PVC-U 'O'-ring socketed pipe to BS 4514:2001.

Specification clause

The rainwater outlets 75HP-GO/100HP-GO* are to be ACO Building Drainage HP vertical spigot outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

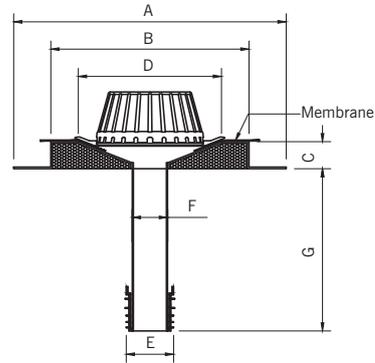
All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.



ACO HP Gully Refurbishment Outlet – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Area Drained‡ (m²)	Flow Rate† (l/s)	Weight (kg)
105950	75HP-RFO	75	240	5.0	7.70
105951	100HP-RFO	100	240	5.0	8.20

† Actual flow rate through outlets may be significantly higher but stated capacity limited to conform to BS EN 12056-3:2000 to prevent siphonic action for gravity rainwater drainage systems.

† Flow rate measured at 35mm head of water over outlet body for outlets up to 110mm diameter and 45mm head for 160mm diameter outlets as per EN 1253-2:2015.

‡ Based on a rainfall intensity of 75mm/hr (0.02083 l/s/m²).

Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)						
			A	B	C	D	E	F	G
105950	75HP-RFO	75	494	354	50	236	89	64	285
105951	100HP-RFO	100	494	354	50	236	114	89	285



Pipework connections

Refurbishment outlets are designed to fit the following range of existing pipework systems:

- 75HP-RFO : 71.5 to 78.5mm internal diameter.
- 100HP-RFO : 97.0 to 104.0 mm diameter.

Specification clause

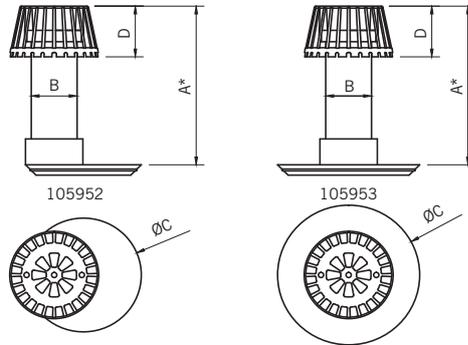
The rainwater outlets 75HP-RFO/100HP-RFO* are to be ACO Building Drainage HP vertical spigot outlets with locked dome grating supplied by ACO Building Drainage (a division of ACO Technologies plc), ACO Business Centre, Caxton Road, Bedford MK41 0LF.

All components to be manufactured from grade LM6 aluminium silicon alloy to BS EN 1706:2010.

All components used within the scope of this system are shown on Drawing No. * and all work shall be carried out strictly in accordance with the manufacturer's instructions and the installation details are set out on Drawing No. *.

* please delete or complete as appropriate.

ACO HP Overflow Outlet Module – Dome Grate



Part No	Product Ref	Nominal Bore Pipe Size (mm)	Flow Rate† (l/s)	Weight (kg)
105952	50/75HP-OF	50	2.4	2.20
105953	100/150HP-OF	75	2.4	2.70

† 35mm head of water over outlet

* Easy cut on site to suit application.

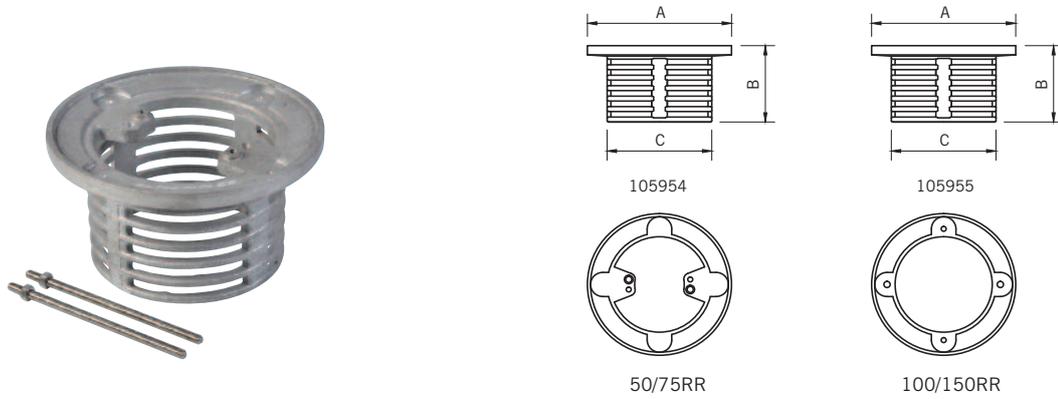
Part No	Product Ref	Nominal bore pipe size	Product Dimensions (mm)			
			A	B	C	D
105952	50/75HP-OF	75	310	90	215	95
105953	100/150HP-OF	100	310	90	273	95

Overflow modules are easily attached to an appropriate circular 50/75HP or 100/150HP rainwater outlets in applications where grating blockage from leaves, for example, would lead to an excessive accumulation of water on the roof area. Unplanned excess water on the roof area can lead to over-spill to the sides of the building and significantly increase the load applied to the roof structure.

Overflow units are supplied with a PVC tube 250mm long that can be easily cut on site to the maximum permissible overflow height required for the application. Overflow units are used in conjunction with an appropriate spigot outlet unit.

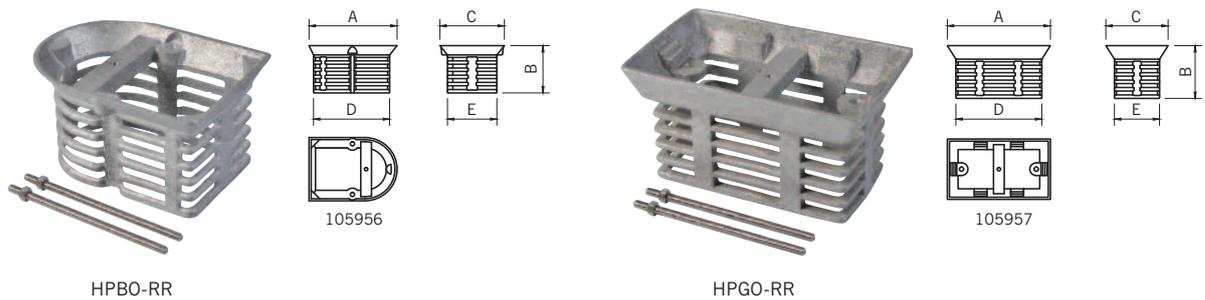


ACO Raising Rings for Circular Outlets



Part No	Product Ref	Suitable for Outlet Product Ref	Product Dimensions (mm)			Weight (kg)
			A	B	C	
105954	50/75RR	50HP-D; 75HP-D; 50HP-F; 75HP-F; 50HP-TD; 75HP-TD; 50HP-TF; 75HP-TF; 50/45HP-D; 75/45HP-D; 50/45HP-F; 75/45HP-F; 50/45HP-TD; 75/45HP-TD; 50/45HP-TF; 75/45HP-TF; 50/90HP-D; 75/90HP-D; 50/90HP-F; 75/90HP-F; 50/90HP-TD; 75/90HP-TD; 50/90HP-TF; 75/90HP-TF	230	125	170	1.50
105955	100/150RR	100HP-D; 150HP-D; 100HP-F; 150HP-F; 100HP-TD; 150HP-TD; 100HP-TF; 150HP-TF; 100/45HP-D; 150/45HP-D; 100/45HP-F; 150/45HP-F; 100/45HP-TD; 150/45HP-TD; 100/45HP-TF; 150/45HP-TF; 100/90HP-D; 150/90HP-D; 100/90HP-F; 150/90HP-F; 100/90HP-TD; 150/90HP-TD; 100/90HP-TF; 150/90HP-TF	230	125	170	1.40

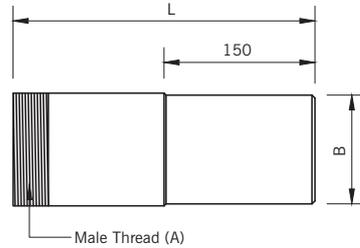
ACO Raising Rings for Balcony and Gully Outlets



Part No	Product Ref	Suitable for Outlet Product Ref	Product Dimensions (mm)					Weight (kg)
			A	B	C	D	E	
105956	HPBO-RR	50HP-BO; 75HP-BO; 100HP-BO	207	117	150	177	115	0.80
105957	HPGO-RR	75HP-GO; 100HP-GO	240	125	145	200	105	1.60

ACO ABS Threaded Adaptors

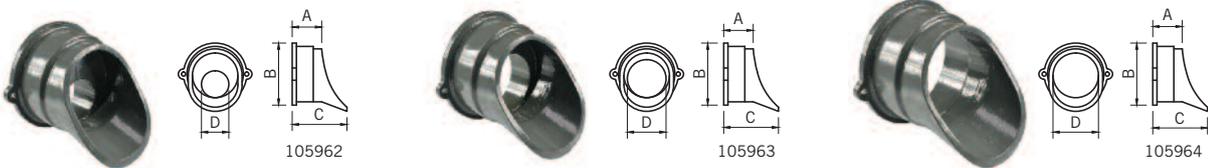
For use with ACO Building Drainage Screw Rainwater Outlets.



Part No	Product Ref	Male Thread A (BSP)	Spigot Dia B (mm)	Length L (mm)	Weight (kg)
105958	50STC	2"	55	300	0.30
105959	75STC	3"	83	300	0.60
105960	100STC	4"	110	300	1.00
105961	150STC	6"	160	300	1.60

ACO Discharge Spouts

Discharge spouts provide a convenient and aesthetically pleasing finishing detail to attach to a parapet/vertical wall outlet pipe. Manufactured from LM6 aluminium silicon alloy they can be directly connected to ACO Building Drainage ABS Threaded Adaptors with a watertight seal and secured to the vertical wall using two fixing lugs. Discharge spout projection from the vertical wall's: 40mm.

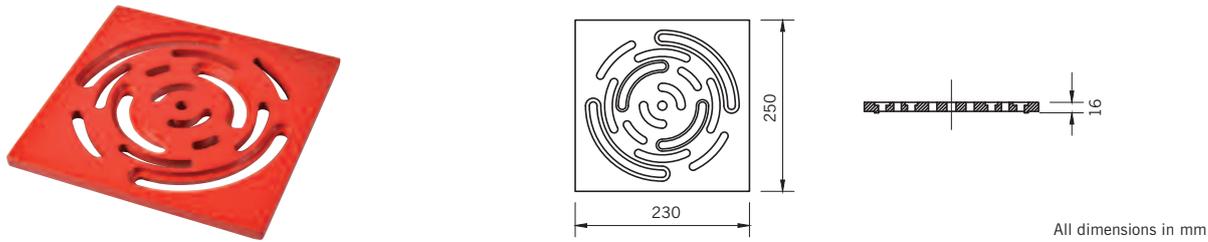


Part No	Product Ref	Product Dimensions (mm)				Weight (kg)
		A	B	C	D	
105962	50HP-SPOUT	75	150	135	64	1.20
105963	75HP-SPOUT	75	150	135	92	1.10
105964	100HP-SPOUT	75	150	135	118	0.90



ACO Terrace Grate for Circular Outlet Raising Rings

Terrace grates are designed for installations with terraced paving slabs or block paviors. Terrace grates can only be used with raising rings for circular outlets as shown on Page 26. A slotted fixing detail allows 90° rotational movement to accommodate slab/pavior patterns.

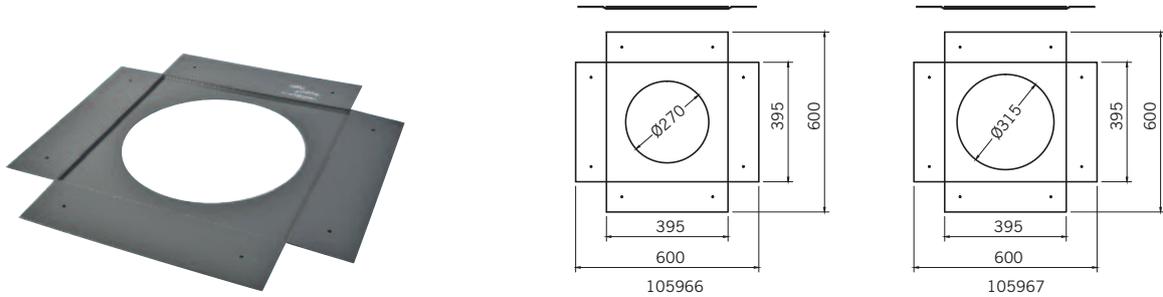


Part No	Product Ref	Grating Size (mm)	Weight (kg)
105965	HPTG	230 x 230 x 16	1.30

Requires 50/75RR or 100/150RR as applicable

ACO Deck Supports for Circular Outlets

Deck supports are used where ACO Building Drainage HP Rainwater Outlets are installed in metal deck roof constructions, providing a stable and secure interface between the outlet and roof. Deck Supports are manufactured from mild steel and primed in a red oxide paint finish and finished in a polyester powder coat. They are suitable for all types of roof decking.



Part No	Product Ref	Suitable for Outlet Product Ref	Weight (kg)
105966	50/75DS	50HP-D; 75HP-D; 50HP-TD; 75HP-TD; 50/45HP-D; 75/45HP-D; 50/45HP-TD; 75/45HP-TD; 50/90HP-D; 75/90HP-D; 50/90HP-TD; 75/90HP-TD	2.20
105967	100/150DS	100HP-D; 150HP-D; 100HP-TD; 150HP-TD; 100/45HP-D; 150/45HP-D; 100/45HP-TD; 150/45HP-TD; 100/90HP-D; 150/90HP-D; 100/90HP-TD; 150/90HP-TD	2.50