

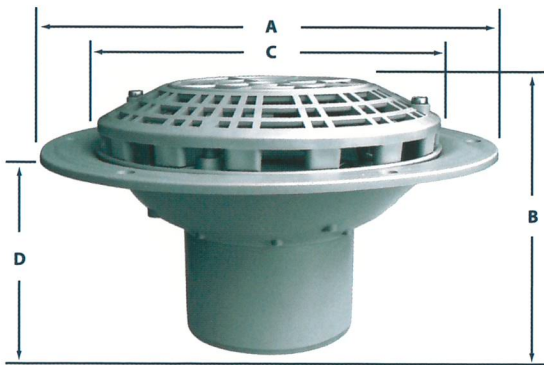
Hepworth



RAIN WATER OUTLETS

PRODUCT & TECHNICAL GUIDE

FLAT ROOF OUTLETS



SPIGOT TAIL

MATERIAL: POLYPROPYLENE

SIZE	CODE	COLOUR	A	B	C	D
82 mm	MCROOFLRO113	GREY	280	163	213	125
110 mm	MCROOFLRO114	GREY	280	163	213	125
160 mm	MCROOFLRO116	GREY	280	163	213	125

ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED

Installation Procedures

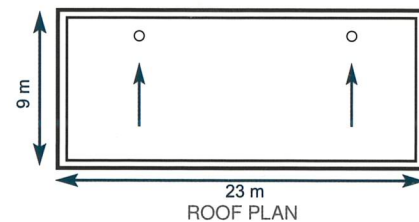
Hot Asphalt

- The roof construction should have an appropriate size hole. To give support to the sloping sides of the roof outlet, the roof screed should be dished. All roof outlets must be securely fixed to the roof structure.
- Roof outlet is now placed in position, making sure that the spigot is truly vertical and then giving a sound push-fit connection into the rainwater pipe.
- Remove grating and clamping ring. Hot asphalt is applied to the roof in layers. The first layer should be allowed to flow into the roof outlet.
- The clamping ring is now secured by the brass wingnuts down onto the hot asphalt. Although the outlet flange will soften from the effect of the hot asphalt, there will be no distortion providing the correct support is given.
- Finish the second asphalt coat to the outlet opening edge and cover with a dusting of fine sand.
- Fix the grating in position with the bolts.

Bituminous Felt Roofing

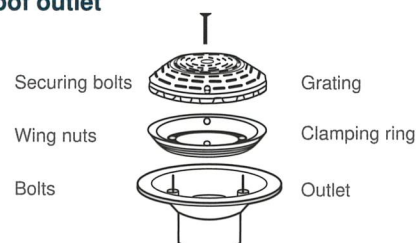
- The hole in the roof should be as in 1 above.
- Set the flange on the roof outlet into a recess in the roofboarding to give a level finish.
- When applying the liquid bitumen to the roof, allow it to cover the outlet flange and the sloping part of the outlet.
- Then when bonding the felt onto the roof with the liquid bitumen, the felt should be taken over the outlet top flange.
- Cut the part of the felt over the hole of the outlet.
- Using blow lamp from the felt down onto the sloping edge and retain with the clamping ring and wing nuts.
- With the bolts, fit the grating into position.

Roof outlet and downpipe sizes for flat roofs. The following example illustrates the use of the drainage data table.

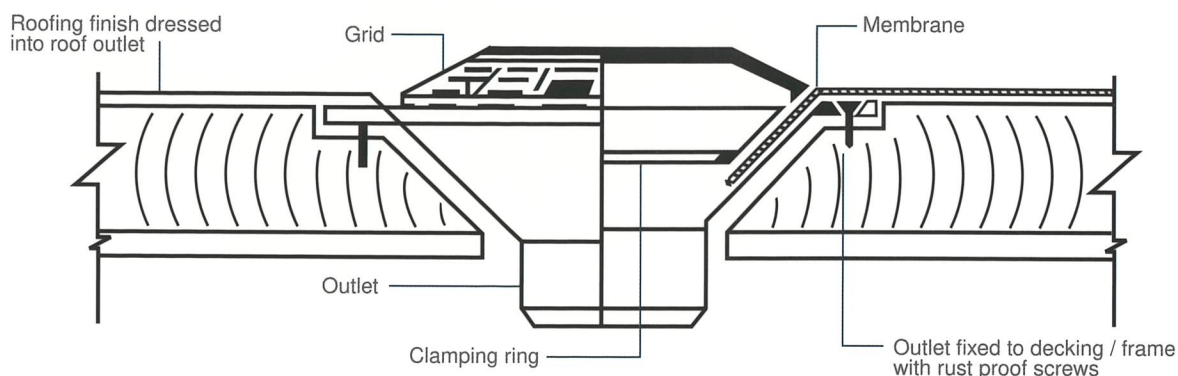


- Determine outlet positions:
Underground drainage schemes will permit two downpipes to be used.
- Determine design requirements:
Constructional factors require depth of water at edge of outlet to be limited to 19mm.
- Calculate roof area: $23 \times 9 = 207$ sq. m.
- Consult table and select outlet size appropriate to roof area and any limitations on depth of flow at edge of outlet: A single 110mm outlet would drain 230 sq. m. That is more than the whole of this roof area if a depth of flow at edge of outlet of up to 25mm was acceptable and is satisfactory falls to the roof could be provided. However, with the depth of flow at edge of outlet limited to 19mm, two 82mm outlets will drain $2 \times 115 = 230$ sq. m. and will, therefore, drain this roof with a reasonable margin, assuming a rainfall intensity of 75mm per hour.
- Downpipe size will be the same as nominal size of outlet: 82mm.
- Further guidance on selecting an acceptable rainfall intensity can be found in the national annex of BS EN 12056: 3: 2000

Roof outlet

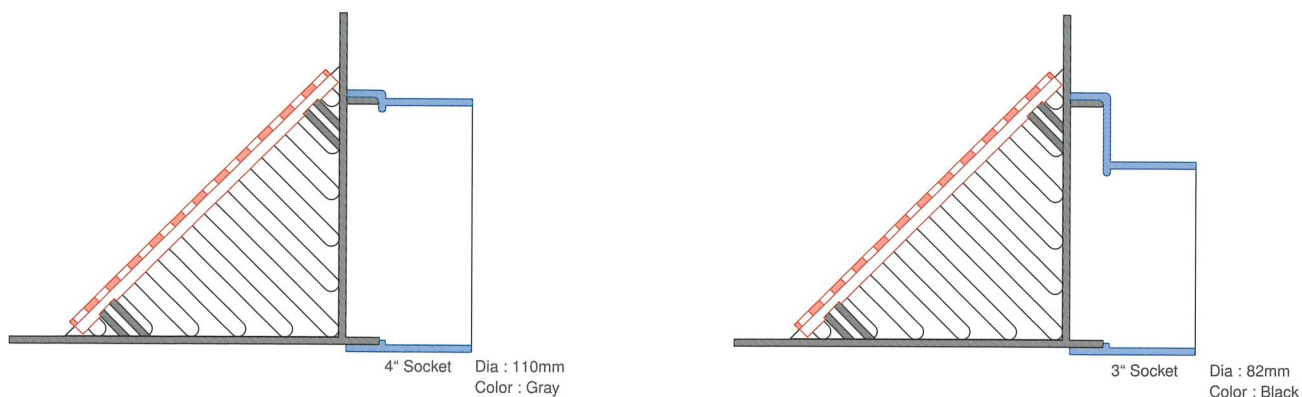


TYPICAL SITE WORK DETAIL



NB: It is important to prevent upthrust on the vertical rainwater pipe due to thermal movement from breaking the joint between the outlet and roof finish. Thermal movement can be accommodated by anchoring a push-fit socket with a socket bracket and allowing a 10mm expansion gap between spigot end and socket depth. A maximum of 4m between expansion joints should be allowed for.

CORNER / ANGLED ROOF OUTLET



1. Corner / Angled roof outlets are manufactured in robust uPVC and complies with the section of BS4514.
2. Corner / Angled roof outlets are lightweight, easy to install and compatible with most flat roof materials, including hot asphalt, bituminous felt and uPVC roof membrane.
3. Sizes are 82mm & 110mm for a wide range of applications.
4. Highly efficient, single 82mm socket tail outlet will drain 75mm of rainwater per hour from 310m² roof (6.45 litre/sec)
5. Integral clamping ring and unique pre drilled flange for quick & secure anchorage.
6. Hi-filter grille design, easily removable for cleaning and maintenance.
7. High temperature resistance.
8. The unique design allows the corner roof outlet to be installed vertically or horizontally.
9. UK manufactured.





U.A.E OFFICES

ABU DHABI

P.O. Box: 4894, Abu Dhabi, UAE

Tel: +971 2 6727585

Fax: +971 2 6783578

Email: hpmeauh@corys.ae

SHARJAH

P.O. Box: 23363, Sharjah, UAE

Tel: +971 6 5438459

Fax: +971 6 5428147

Email: hpmeshj@corys.ae

AL AIN

P.O. Box: 80862, Al Ain, UAE

Tel: +971 3 7210727

Fax: +971 3 7211292

Email: hpmealn@corys.ae

QATAR OFFICE

DOHA

HEPWORTH PME (QATAR) W.L.L

P.O. Box 50207, Doha, Qatar

Tel: +974 44506810

Fax: +974 44506811

Email: info@hepworthpme.com.qa

MESAIEED

HEPWORTH PME (QATAR) W.L.L.

P.O. Box 50207, Mesaieed, Qatar

Tel: +974 44760588

Fax: +974 44760525

OMAN

ABDUL GHAFFAR HUSSAIN

TRADING LLC

P.O. Box 117, PC 130,

Muscat, Sultanate of Oman

Tel: +968 24216938

Fax: +968 24210032

Email: hepworth@omantel.net.com

Email: info.oman@corys.ae

BAHRAIN

HEPWORTH W.L.L

Building 1, Avenue 0010

P.O. Box 143, Manama, Bahrain

Tel: +973 17672050

Fax: +973 17672583

Email: info.bahrain@corys.ae

SAUDI ARABIA

ABDUL GHAFFAR INDUSTRIES LLC

Al Nuwar Bint Malik Street,

Building 18 - Al Rawdah District

Tel: +966 547900444

Email: info.ksa@corys.ae

HEAD OFFICE

HEPWORTH PME LLC DUBAI

P.O.Box 2345, Dubai, UAE

Tel: +971 4 2894670

Fax: +971 4 2894620 / 1

Email: info@corys.ae

SALES/CUSTOMER SERVICE customer.service@corys.ae

www.hepworth.ae