

TECHNICAL DATA SHEET

Bauder Hot Melt Compact – Vertical Outlet DN100

Product Description A thermally insulated outlet incorporating a one-piece rigid polyurethane foam body that forms the integral sump and spigot designed for use when connecting to conventional gravity drainage systems.



The thermal value of the rigid foam body prevents condensation from forming on the underside of the outlet body. The integrated screw down clamping ring ensures security between the waterproofing system and the outlet.

It is manufactured with pre-cast studs to receive the fasteners of the clamping ring. This ensures full mechanical sealing between the outlet unit and the Hot Melt Waterproofing and Access / Protection Sheet.

Polyamide domical leaf grille permits free flow of water, whilst preventing leaf litter or other debris from entering the outlet. Easily removed to allow for maintenance.

Application Fields For use within Bauder Hot Melt Inverted and Hot Melt Cold Roofs. (Use Bauder Hot Melt Blue Roof Compact Outlet DN70 for Blue Roofs)

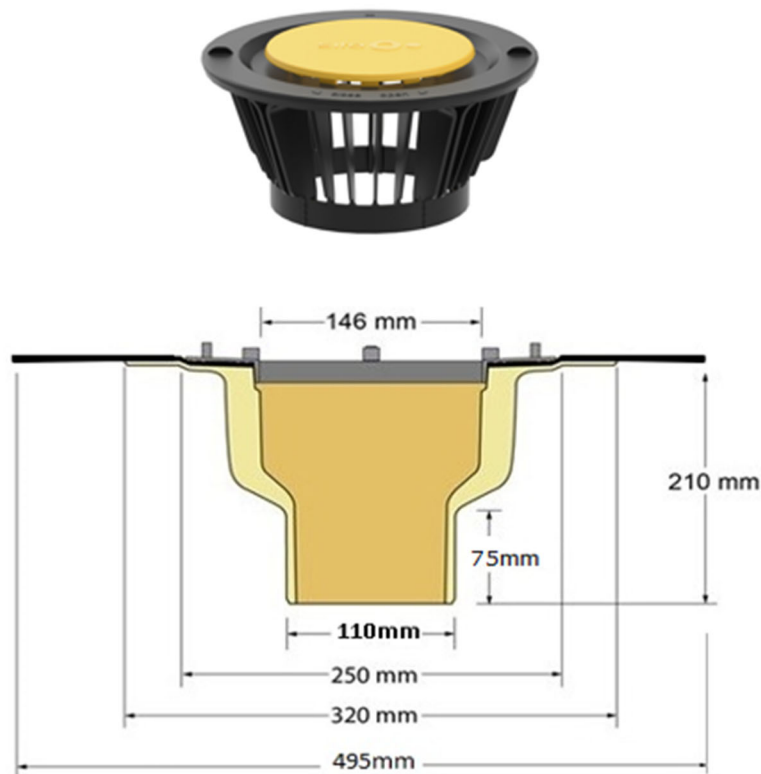
PRODUCT INFORMATION AND TECHNICAL PERFORMANCE			
Characteristic	Test Method	Unit	Body
Material (body)	DIN EN 1253-2	-	Polyurethane
Size DN (spigot)	-	mm	100 diameter
Outside Diameter (spigot)	-	mm	110 diameter
Outlet Opening	-	mm	146 diameter
Opening/Core borehole (deck)	-	mm	250 diameter
Clamping Ring			
Material	-	-	Aluminium
Size	-	mm	250 diameter
Reinforcement			
Material	-	-	EPDM
Size	-	mm	450 x 450 x 1.5
Shock Pad			
Material	-	-	EPDM
Size	-	mm	250 diameter
Leaf Grille			
Material	-	-	Polyamide
Size	-	mm	250 taper to 150
Reinforcement Plate (Sold Separately)			
Material	DIN EN 1090-4	-	Galvanised steel
Size (external)	-	mm	600 x 600
Internal hole	-	mm	250 diameter
Product testing	EN 1253-2	-	All components comply. Regulated Building Products

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CERTIFICATION AND ENVIRONMENTAL INFORMATION	
BBA Certificate	-
Environmental Product Declaration (EPD)	-
Declaration of Performance (DoP)	N/A
Declaration of Conformity (DoC)	N/A
International Standards Organisation (ISO)	ISO 9001:2015 Quality Management Certificate No 12 100/104 14752 TMS ISO 14001:2015 Environmental Management Certificate No 12 100/104 14752 TMS

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The dimensions of the Hot Melt Compact – Vertical Outlet are as shown below:



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Flow Rates

BS EN 12056-3:2000 Flow rates (litres/ sec)

- The figures below are based upon the requirements of BS EN 12056-3:2000 and performances are given within 1/3 rainwater pipe capacity limits as required by BS EN 12056.
- Flow rates are typically taken using a 35 mm head of water, which for the Hot Melt Compact – Insulated Vertical Outlet gives a flow rate performance of 6.1 litres/sec. Figures calculated with leaf guard in-situ.

Head of water (mm)													
Size	5	10	15	20	25	30	35	40	45	50	55	60	65
100	0.6	1.5	2.3	3.3	4.3	5.2	6.1	7.3	8.5	9.4	10.3	11.0	11.7

When designing a rainwater scheme, the following considerations should apply:

- Always make provision for an additional back-up outlet to ensure that the roof will continue to drain in the event of a blockage, even if a single outlet is deemed to have sufficient flow to drain the area concerned.
- Allow a safety factor of 10% above the published maximum outlet capacity to take account of greater than designed storm intensities.
- Check that all outlets are correctly installed before completion or handover.
- Check that all pipe connections are secure and that the leaf grilles are fitted.
- All rainwater outlets should be inspected twice yearly for blockages and to clean out the outlets and remove any debris or leaf litter as part of the routine maintenance schedule.

INSTALLATION GUIDANCE

General Installation Instructions

When installing Bauder Insulated outlets, the following should be observed.

The roof outlets should be installed at the low point of the roof falls.

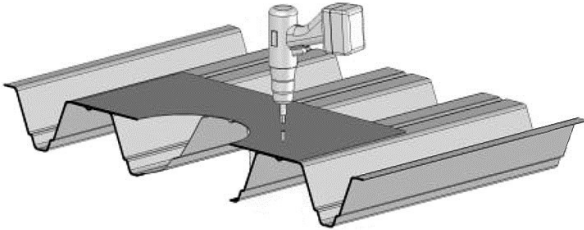
In both instances the outlet body must be mechanically fixed to the deck.

Roof outlets must be freely accessible for maintenance.

PROFILED METAL DECKS

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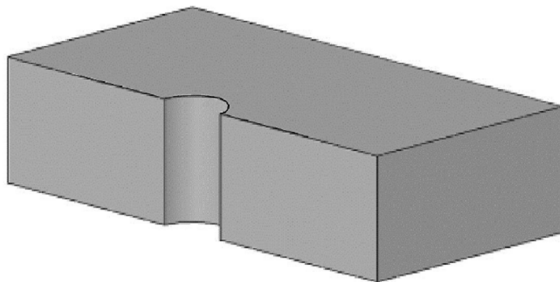
With profiled metal decks, the hole penetration is to be reinforced by a galvanised steel strengthening sheet (available from Bauder Ltd.)



In the case of profiled galvanised steel decking, the edges of the cut hole to be treated to prevent future corrosion.

CONCRETE DECKS

With cast in-situ concrete decks, the roof outlet hole for should be pre-cast into the deck using formwork. The outlet is an integral component of the Bauder waterproofing system and this precaution is important to prevent damage to the outlet and the waterproof connecting flange prior to installation.



For concrete decks, the roof outlet hole (\varnothing 250 mm) should be pre-cast in-situ so the outlet can be installed by the roofing contractor when the waterproofing system is installed

Concrete deck installation Instructions

1. Core hole through concrete deck 250mm or cast in-situ.
2. Place smaller diameter shock pad EPDM gasket on to deck surface if installation is via a pre cored hole.
3. Install outlet into hole sitting on top of shock pad EPDM gasket.
4. Mechanically fasten the outlet into substrate using the three pre-drilled holes in the polyurethane outlet flange.

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5. Install the first layer of Bakor 790-11 Hot Melt Waterproofing on to the first 35mm of the polyurethane outlet flange.

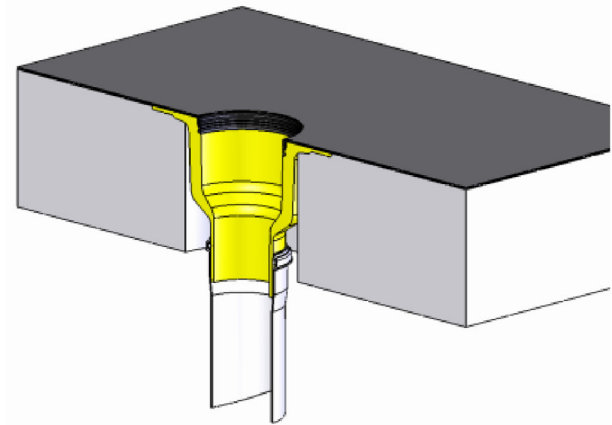
Note - If the first coat of Hot melt is taken further than this into the depression on the flange, it is very difficult to sit the screw flange correctly.

6. Install the large 495 x 495mm EPDM Reinforcement into the hot Bakor 790-11 Hot Melt Waterproofing

7. Install the second coat of Bakor 790-11 Hot Melt Waterproofing, fully covering the EPDM reinforcement up to the edge of the outlet hole.

8. Install the Bauder Access/Protection Sheet over the hot Bakor 790-11 Hot Melt Waterproofing second coat and trim to ensure the outlet hole is clear and free from waterproofing material. The Bakor 790-11 Hot Melt Waterproofing must encapsulate the whole of the 495 x 495mm EPDM Reinforcement.

9. Place the clamping ring into position ensuring it provides a physical clamp between the Bauder Protection Sheet and outlet body. Tighten the countersunk head screws supplied with a screwdriver.



CONNECTION TO PIPEWORK

Hot Melt Compact – Insulated Vertical Outlets are suitable for connection to:

- 110 mm uPVC “O” ring socketed soil grade pipe to BS 4514: 1983
- Socketed and socket-less cast-iron pipework to BS 416:1973 and EN 887. Socketed pipework will require cold caulking or PVC to cast iron adaptors. Socketless pipework can be connected using an appropriate SML mechanical coupling.
- HDPE pipework with appropriate SML mechanical coupling

The following considerations should apply:

Always make provision for an additional back-up outlet and/or Bauder Parapet Emergency Overflow DN70 to ensure that the roof will continue to drain in the event of a blockage, even if a single outlet is deemed to have sufficient flow to drain the area concerned.

Allow a safety factor of 10% above the published maximum outlet capacity to take account of greater than designed storm intensities.

Check that all outlets are correctly installed before completion or handover.

Check that all pipe connections are secure and that the leaf grilles are fitted.

All rainwater outlets should be inspected twice yearly for blockages and to clean out the outlets and remove any debris or leaf litter as part of the routine maintenance schedule.

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Transport:	<p>Bauder Hot Melt Compact Vertical Outlet DN100 are generally transported direct to site from Bauder on artic curtain sided vehicles with no offload facility. Smaller specialist vehicles such as rigid/moffett/flat bed/pump truck & tail lift are available.</p> <p>This product can also be despatched via a courier as a single unit.</p>
Storage Guidance:	<p>The product should be stored dry, protected against weathering, and must not be exposed to temperatures exceeding 35°C. The products must not be exposed to a direct naked flame or other ignition sources, or to solvents or other chemicals. Ensuring the product(s) are clear of buildings and any other storage areas.</p>
Pack/Packaging Material:	<p>Bauder Hot Melt Compact Vertical Outlet DN100 components are contained within a cardboard box and is stood in a vertical position on a one-way pallet covered with polyethylene shrink wrapping.</p> <p>Box contents: EPDM Shock Ring (deck seat if required) loose, DN100 Outlet Body loose, 495 x 495mm EPDM Reinforcement loose, Clamping Ring & fixings to secure to main body in polyethylene bag. Installation instructions.</p> <p>Mechanical lifting equipment is required to offload full pallets.</p>
Product Identification:	<p>Product information is available on the cardboard box it is contained within.</p>
Handling/PPE:	<p>All persons using this product should be fully aware of the manual handling methods as roofing materials can be heavy and can cause serious injury. When using this product, installers should be provided with, and wear, suitable personal protective equipment.</p> <p>There are no requirements for special PPE when installing Bauder Hot Melt Compact Vertical Outlet DN100</p>
Shelf Life:	<p>When stored correctly, the product has no stated shelf-life.</p>
Disposal guidance:	<p>Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.</p>
Re-Use Options of Product:	<p>This product has no other uses and is not recyclable.</p>
Further Information/Documents:	<p>Current documents such as brochures, installation guides etc can be found by visiting www.bauder.co.uk</p>

Safety Data Sheets are designed to provide the necessary information to recipients of substances and mixtures in the EU & UK.

This product is classed as an article; therefore, this product does not have a requirement for a Safety Data Sheet.