

PRODUCT DATA SHEET

**BauderBLUE ST-HM adjustable flow restrictor (hot melt)**

The BauderBLUE ST-HM adjustable flow restrictor is fitted into the RWO and is used to control the flow of water from a blue roof, it is part of the Bauder blue roof system. It is comprised of four parts: baseplate with stainless steel slide control, overflow pipe, baseplate inner and outer seal. The polyamide baseplate fits within the 70mm vertical outlet, with the EPDM outer seal creating a watertight fit. The HDPE overflow slots into the central hole of the baseplate with an inner EPDM seal preventing any leaks.



**Intended Use**

The BauderBLUE ST adjustable flow restrictor is designed to be fitted into a standard Bauder Bitumen Blue Roof Vertical Outlet DN70 as part of a Bauder blue roof system.

There are two versions of the restrictor, one for use with Bauder's hot melt system and the other used with Bauder's differing total roofing system.

The Baseplate has a stainless-steel slide plate which can be set to 5 positions to control the flow rate for the outlet. The correct position for the plate will be shown on the Bauder Blue Roof Calculation Sheet.

PRODUCT INFORMATION AND TECHNICAL PERFORMANCE		
Characteristic	Unit	Baseplate
Material		Polyamide + stainless-steel slide control
Height	mm	32 (42mm to top of Slide Control)
Diameter (c)	mm	153 (excluding outer seal)
Overflow Aperture (a)	mm	40
Supply Form		As part of a 4-part set
Overflow Pipe		
Material		HDPE
Height	mm	500 max as std (cut down to H-Max)
Overflow Internal Diameter	mm	34
Supply Form		As part of a 4-part set
<b>Note: this product requires additional blue roof products to complete the system</b>		

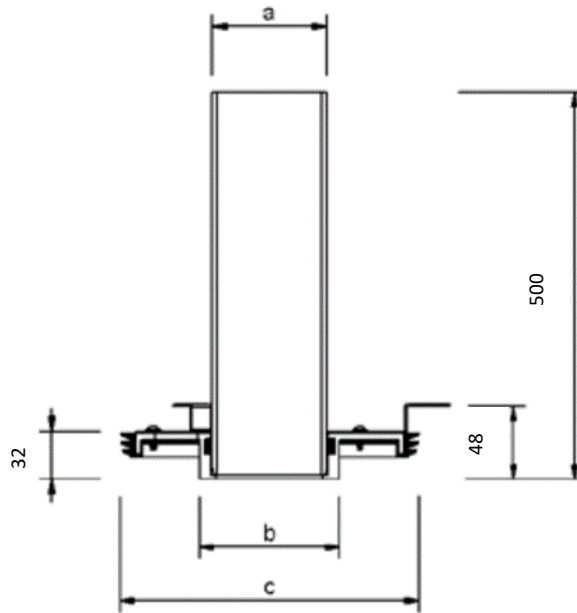
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PRODUCT INFORMATION AND TECHNICAL PERFORMANCE		
Characteristic	Unit	Inner & Outer Seal
Material		EPDM
Diameter	mm	57 (inner seal) 153 (outer seal)
Supply Form		As part of a 4-part set
<b>Note: this product requires additional blue roof products to complete the system</b>		

Discharge rate in l/s - Bauder Adjustable Flow Restrictor - Hot Melt																				
	Head of water in mm																			
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
<b>Position 1</b>	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0
<b>Position 2</b>	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.41.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8
<b>Position 3</b>	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.6
<b>Position 4</b>	1.4	1.6	1.7	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.3	3.4
<b>Position 5</b>	1.6	2.0	2.1	2.3	2.5	2.7	2.8	3.0	3.1	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3

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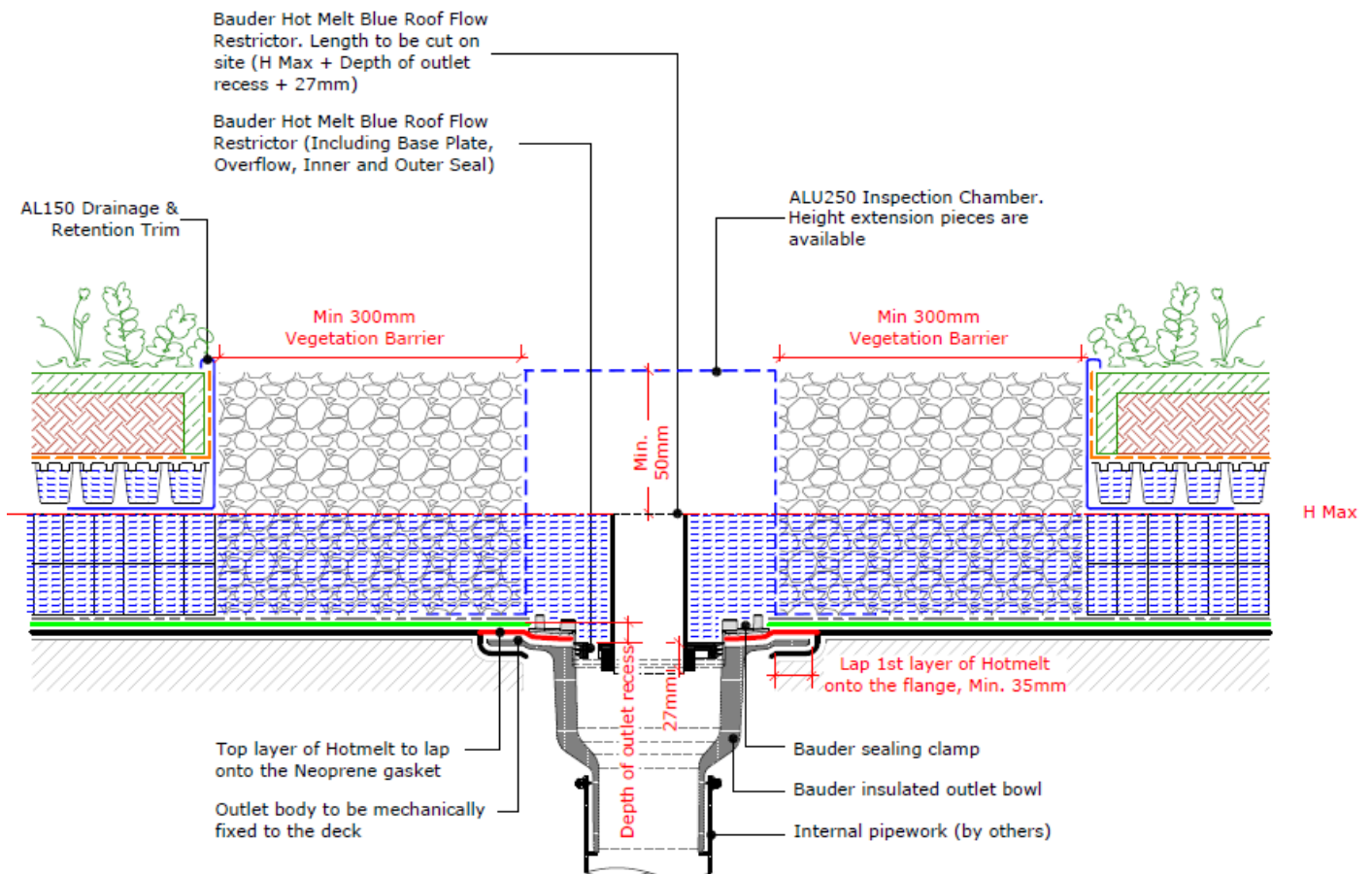
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MAIN CHARACTERISTICS

- Robust, low maintenance design
- Overflow pipe is cut to a bespoke length for individual project
- UV/IR radiation resistant
- Flow Rate can be adjusted via 5 position slide plate to match that required for a particular roof/site.
- Follows the NFRC (National Federation of Roofing Contractors) Technical Guidance Notes for the Construction and Design of Blue Roofs & CIRIA Blue Roof Guidance (Construction Industry Research and Information Association)
- Packaging: Supplied in PE plastic bag including installation guide within a cardboard box.

Section Detail



BLUE ROOF SURFACE FINISHES

Blue Roofs should have a surface finish above the water attenuation layers, this surface finish can be constructed from any suitable permeable surface, to provide visual masking, protection of the system, filtration of airborne debris to prevent blockages and ballasting preventing wind uplift and floatation of the components. An impermeable surface can be used but adequate measures should be taken to ensure the water can filter into the Blue Roof attenuation void.

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### BLUE ROOF DESIGN GUIDANCE

- A Blue Roof should not be considered as a water storage solution.
- No British or European standard covers this type of application at the present time.
- The Blue Roof must be designed to attenuate the predicted rainfall volume required to prevent ponding or flooding on the roof surface. The surfacing should drain by direct permeability or drainage channels linking into the Blue Roof system.
- Emergency drainage must be provided within the primary outlet or by a secondary method of drainage to facilitate the removal of excess rainfall if the designed capacity is exceeded, this should be placed at the top of the water attenuation layer.
- The Blue Roof, void forming components, thermal insulation and waterproofing must have the correct structural capacity to resist the permanent (dead) load of the required finishes and any temporary (live) loading produced by maintenance/emergency vehicles or other elements. The components should be designed to accommodate the full capacity of the predicted storm water for a 24-hour period.
- All components must have chemical resistance to all potential hazardous material e.g. Fertilisers, petrochemicals and water bound pollutants carried in by rainfall typically from 4-9PH.
- An electronic or suitable integrity test should take place, by an independent and competent person, on the completed waterproofing prior to the installation of any Blue Roof void forming or landscaping components. The satisfactory waterproofing integrity certification must be retained.
- See Bauder's Blue Roof Design Considerations for more information.

### BLUE ROOF MAINTENANCE GUIDANCE

When maintaining a blue roof, the following considerations should apply: -

- Regularly clear all debris from the roof surface, rainwater outlets, chutes, gutters etc. Debris must be removed from the roof and not simply flushed down rainwater pipes.
- Annually inspect the waterproofing system visible at all upstands, to ensure it is firmly adhered to the detail that it is waterproofing.
- Cut back tree limbs that overhang the roof to give a one metre clearance outside the roof edge. This will significantly reduce blockage of drainage ways due to fallen leaves.
- Ensure that all rainwater pipes are free from blockages and that water flows freely through them.
- For full details see Bauder's Blue Roof Maintenance Guide.

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<b>CERTIFICATION AND ENVIRONMENTAL INFORMATION</b>	
Environmental Accreditation	Interseroh Climate Protection Certificate
Third Party Accreditation	TUV (Germany)
International Standards Organisation (ISO)	ISO 9001:2015 Quality Management Certificates EN1253-2
Product testing	ISO 14001:2015 Environmental Management Certificates EN1253-2  All components comply with EN 1253-2 Regulated Building Products
Supply Form	Boxed on pallet (circa 60 per pallet)
Packaging	Transparent Plastic Bag (80my - 0.029Kg LDPE) within Cardboard box 0.311 Kg (FSC Certified)
Recycled content of packaging	none
<b>INSTALLATION GUIDANCE</b>	
<p>This Adjustable Flow Restrictor is designed to fit into the Bauder DN70 Compact Outlet. It is recommended that the restrictor is NOT fitted until the roof is completed finished and rainwater run-off is flowing clear. The base plate and overflow have seals which must be fitted to ensure the restrictor is watertight, a lubricant is supplied. The flow position on the slide control should be selected and locked into place using a Torx 2 screwdriver prior to fitting.</p>	

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Intended use of this product should be verified with Bauder to ensure suitability and compliance with applicable guidance, regulations, legislations, project requirements, specifications, and installation techniques.

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