Radmat® building products Specialists in Roofing and Waterproofing

sita

SitaStandard

Insulated Vertical Rainwater Outlets

Product Data Sheet



SitaStandard Insulated Rainwater Outlets are high performance, robust and thermally insulated to prevent point cold-bridging.

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General Information

SitaStandard rainwater outlets are a robust polyurethane cast construction providing thermal insulation from the surrounding structure which prevents the build-up of condensation to the underside. Units are factory sealed to a 495 x 495mm connection flange for direct compatibility with Radmat waterproofing systems. For liquid-applied waterproofing systems the membrane is bonded directly onto the polyurethane outlet body.

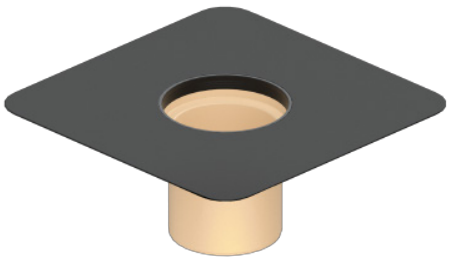
Features and Applications

- Suitable for Built-up Warm, Inverted and Cold Roof applications
- Thermally insulated body to DIN EN 1253-2
- High discharge rate of up to 7.4 l/s to BS EN 12056-3:2000
- Homogeneous roofing membrane connection
- Available in sizes DN 70, DN 100, DN 125, DN 150 and DN 200
- Weather Resistant (UV/IR radiation, rain/snow, temperature, ozone, etc.)
- Impact and shock resistant
- Includes Dome Grate / Leaf Guard
- Easy to install

Component Family



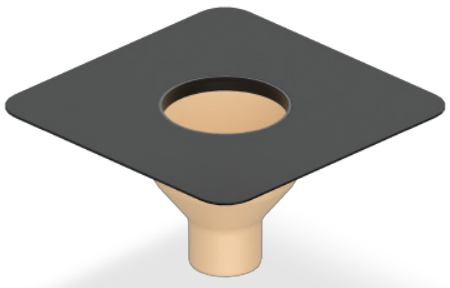
Leaf Guard
(included with Outlet)



Extension Unit
(for Built-up Warm Roofs)



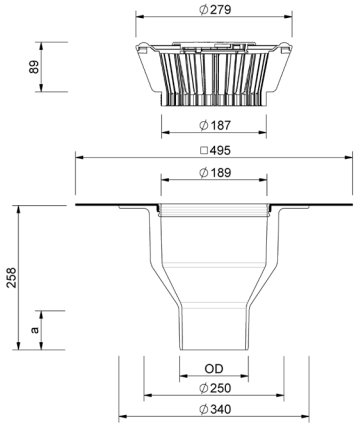
Multi-lip angle sealing ring
(for backflow protection)



Vertical Outlet

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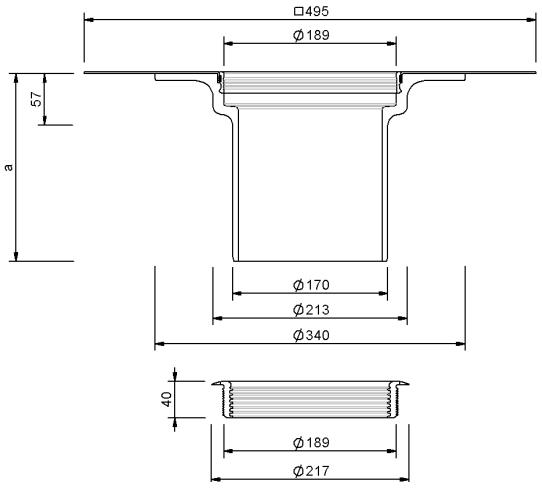
Technical Drawings
Vertical Rainwater Outlet



SIZE DN	OD*	a (mm)	DECK OPENING (mm)	PRODUCT REF
70	75	65	250	10 02 00
100	110	67		10 04 00
125	125	70		10 06 00
150	160	77		10 08 00
200	200	101		10 10 00

* OD = Outer Diameter (mm)

Extension Unit
(Built-up Warm Roofs)



a (mm)	INSULATION THICKNESS RANGE (mm)	PRODUCT REF
206	60 -160	10 25 00
254	60 - 220	10 26 00
555	60 - 520	10 50 00

Where **insulating body** is not used a suitable timber support frame should be assembled to support the outlet or extension unit.

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Optional Components



For a rapid and professional installation, a 500 x 500 x 60mm pre-formed **insulating body** manufactured from Polyurethane (PUR) insulation which eliminates the need for mechanical fixings through the Extension Unit element on built-up warm roof constructions, further minimising potential cold-bridging. Thermal resistivity 0.025 W/mK, compressive strength 200kPa.

Product Ref. 10 90 06



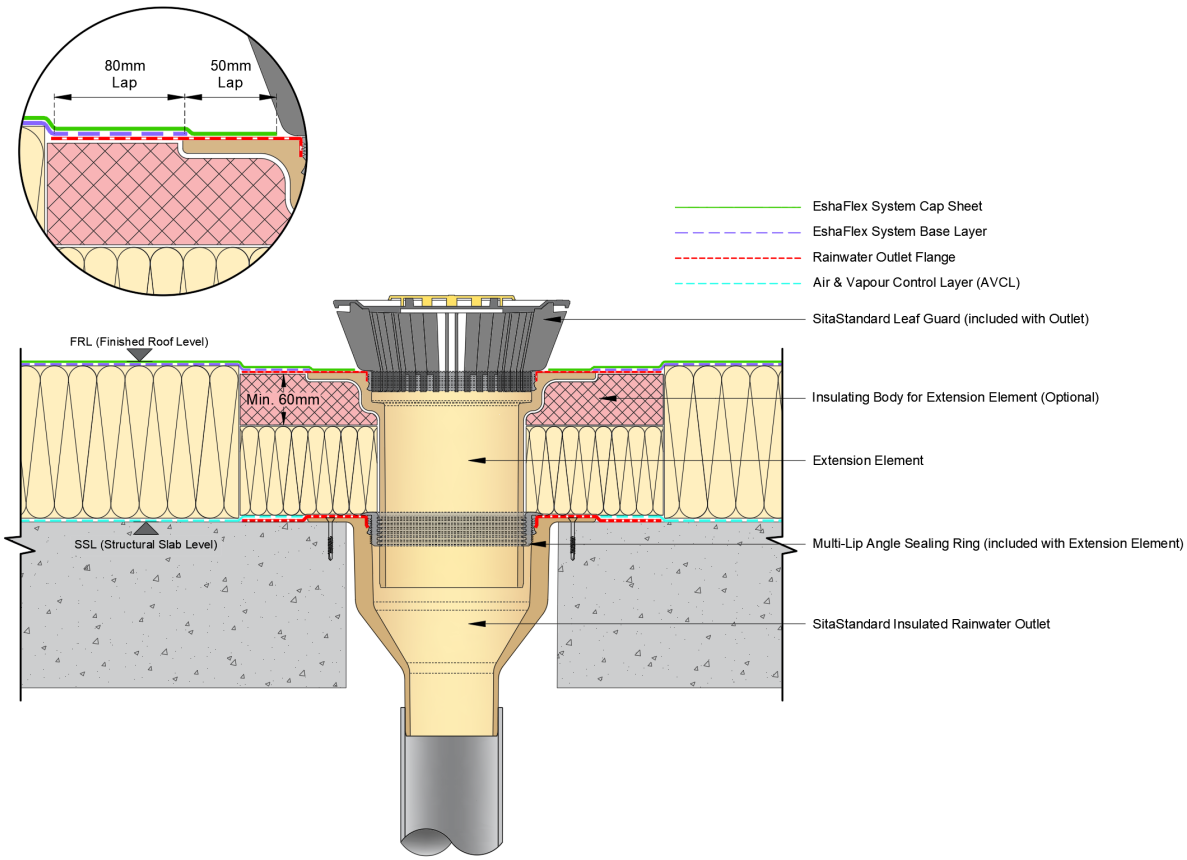
For installation on profiled metal decks, a prefabricated galvanised steel **reinforcement plate** measuring 600 x 600 x 1.25mm. To be mechanically fastened to deck crowns at minimum 120mm centres.

Product Ref. 10 90 00

Connection to surrounding Pipework:

- uPVC “O” ring socketed soil grade pipe to BS 4514: 1983. Connection can be made directly, or with heat-shrink adaptors where necessary.
- 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.
- Socket-less pipework can be connection using an appropriate mechanical coupling.
- HDPE, PP or Stainless Steel pipework with appropriate mechanical coupling.

Installed Example in EshaFlex 2-Layer System



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Technical Data

ELEMENT: INSULATING VERTICAL RAINWATER OUTLET Characteristic	Value
Material	**To DIN EN 1253-2**
Outlet Body **Leaf Guard** **Membrane Flange**	Polyurethane Polyamide SBS Bitumen (standard)
Fire Classification	Euroclass E to BS EN 13501-1
Temperature Resistance Minimum	-40°C
Temperature Resistance Maximum	80°C
Depth of Unit including Spigot	258 mm
Bitumen Membrane Flange:	
Dimensions	495 x 495 mm
Upper Finish	Thermofusible polyethylene film (Torch-receivable)
Lower Finish	Fleece-backed – bond with Radmat Insta Stik™ Roofing Adhesive
Weight	2.5 kg
Flow Rate	7.1 – 7.6 l/s*

*Flow rate based on 35mm head of water using calculation methodologies from EN 12056-3:2000 including leaf grate.
For bespoke project-specific drainage calculations please contact Radmat Technical Department.

ELEMENT: EXTENSION UNIT (ONLY FOR USE ON BUILT-UP INSULATED WARM ROOFS) Characteristic	Value
Material	**To DIN EN 1253-2**
Outlet Body **Multi-Lip Sealing Ring** **Membrane Flange**	Polyurethane EPDM Rubber SBS Bitumen (standard)
Fire Classification	Euroclass E to BS EN 13501-1
Temperature Resistance Minimum	-40°C
Temperature Resistance Maximum	80°C
Minimum depth of surrounding insulation	60 mm
Maximum depth of surrounding insulation	520 mm
Bitumen Membrane Flange:	
Dimensions	495 x 495 mm
Upper Finish	Thermofusible polyethylene film (Torch-receivable)
Lower Finish	Fleece-backed – bond with Radmat Insta Stik™ Roofing Adhesive
Weight	2.3 kg
Flow Rate	7.1 – 7.6 l/s*

*Flow rate based on 35mm head of water using calculation methodologies from EN 12056-3:2000 including leaf grate.
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Technical Data

ELEMENT: INSULATING BODY (FOR EXTENSION UNIT) Characteristic	Value
Material	**Polyurethane (PUR)**
Dimensions	500 x 500 mm
Depth	60 mm
Fire Classification	Euroclass E to BS EN 13501-1
Thermal Conductivity	0.025 W/mK
Compressive Strength	200 kPa
Weight	1.8 kg

Only for use with Extension Unit on Radmat BROOF(t4) waterproofing systems with combustible insulation.
See alternative products for Radmat waterproofing systems with non-combustible insulation. Bond insulating body directly to Radmat Air & Vapour Control Layer (AVCL) with Insta Stik™ Roofing Adhesive.

Rainwater Drainage systems should be designed and calculated in accordance with *EN 12056-3:2000 Gravity Drainage Systems & BS 6229:2018 Flat roofs with continuously supported flexible waterproof coverings – Code of practice*. It is the responsibility of the project engineer to ensure that these standards are achieved and maintained.

This information given in good faith and is based on the latest knowledge available to Radmat Building products Ltd. Whilst every effort has been made to ensure that the contents of the publication are current while going to press, customers are advised that products, techniques and codes of practice are under constant review and liable to change without notice.