

# RAINWATER OUTLETS FOR USE WITH SINGLE PLY MEMBRANE SYSTEMS

#### WHAT ARE SPRA COMPONENT QUALITY STANDARDS?

SPRA Component Quality Standards set a benchmark of performance for products used in single ply membrane systems. They are a vital aid to specification and define the minimum technical standard for membership of the Association. All SPRA CQS are available by download from <a href="https://www.spra.co.uk">www.spra.co.uk</a>

#### PRODUCT DESCRIPTION

Rainwater outlets manufactured to BS EN 1253-2:2015. Components of metal or polymer designed to seal to the single ply membrane and connect directly to rainwater drainage pipework. This standard applies to outlets for gravity drainage although many of the requirements for siphonic drainage will be the same. For information on siphonic drainage systems contact <a href="https://www.siphonic-roof-drainage.co.uk">www.siphonic-roof-drainage.co.uk</a>

#### **TYPICAL APPLICATIONS**

Warm roof, inverted warm roof and cold deck systems in new construction and refurbishment for vertical and horizontal applications.

#### **EUROPEAN STANDARDS AND TECHNICAL SPECIFICATION**

BS EN 1253-2:2015.

REQUIREMENTS FOR DECLARATION OF CHARACTERISTICS AND PERFORMANCE				
Product characteristic	Test	Requirements	Performance declaration	Certification
Flow Capacity (by head of water)	BS EN 1253-3-2015	Flow rates must be tested with a leaf guard.	By manufacturer	Third party
2. External diameter of spigot	By measurement in mm	Manufacturer to quote OD of outlet spigot. Range of sizes to suit both new build and refurbishment situations.	N/A	N/A
3. Thermal resistance	BR 497	Currently optional but best practice.	By manufacturer	Third party
4. Resistance to climatic influences	BS EN 1253-3:2015	Frost resistant to -20°C and heat resistant to 80°C tested in accordance with point 5.8 of BS EN 1253-3:2015.	By manufacturer	Third party
5. UV resistance		Any exposed plastic parts to be manufactured from UV stable material.	By manufacturer	Third party

### **DESIGN / SYSTEM REQUIREMENTS**

- 1. Seal to single ply membrane: to be formed by either direct weld or clamping ring purpose designed for polymeric & elastomeric membranes in the range 1.1-2.0mm thickness.
- 2. Coating to metal to enable direct welding (including minimum thickness): to be approved by at least one SPRA membrane manufacturer.
- 3. Mechanical attachment: design to allow for mechanical attachment to deck, incorporating spacer collars as required.
- 4. Outlet spigot: Sizes to suit all common downpipes for new build applications. In refurbishment applications the spigot to have a seal to prevent water back-up. Spigot sizes to suit standard HDPE, PP/PE and cast-iron pipes.
- 5. Rainwater Calculations: The supplier must have the ability to carry out rainwater calculations in accordance with BS EN 12056-3:2000.

## SPRA MEMBERS IN THIS PRODUCT CATEGORY

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