

**Technical Specification**  
**Wavin Osma Rainwater Systems**

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## **Wavin Osma Rainwater Systems**

### **General Overview**

The Wavin Osma range offers a choice of six rainwater gutter profiles to meet the varying aesthetic, performance and installation requirements for all types of building, from single dwelling to large residential, commercial or industrial premises.

All products must be installed in accordance with instructions issued by Wavin Limited.

### **Applications**

Wavin Osma Rainwater systems can be specified for the following applications:

- Gravity Rainwater Applications

Type of Projects include but are not limited to:

- Residential Houses
- Apartment Blocks
- Student Accommodation
- Hotels
- Schools

### **Wavin Osma Rainwater Characteristics**

Outstanding flow performance

- Hydrodynamic apertures on outlets for outstanding flow performance.

Aesthetic design details

- Concealed sockets to hide cut ends (all systems).
- Hanging brackets to allow clean line of guttering (StormLine).

Easy to install

- Our 'Flexiclip' and seal jointing mechanism makes it easy to connect gutter to fittings. Because the clip is flexed, rather than the whole component, this ensures a positive, permanently watertight joint. Gutter joint fittings are marked to indicate the limit for positioning gutter ends to allow for thermal expansion.

Specialist design features

- Wavin Osma StormLine is an ogee profiled system with many unique features including a high front edge to catch and control runoff and stop overshoot, side fixing wings to aid installation and downpipe restraint to give a more secure hold (valuable on taller buildings).

Specialist seal technology

- Our retained seals provide a secure, watertight fixture with the flexibility to cope with thermal expansion.

### Material

PVC-U

### Colour

Black – RoundLine / SquareLine / StormLine / DeepLine / SuperLine / RoofLine

Grey – RoundLine / DeepLine / RoofLine

White – RoundLine / SquareLine / StormLine / DeepLine

Brown – RoundLine / SquareLine / DeepLine

Anthracite Grey – DeepLine

### Gutter Dimensions

<b>System</b>	RoundLine	SquareLine	StormLine	DeepLine	SuperLine	RoofLine
<b>Width (mm)</b>	114	103	111	113	125	150
<b>Depth (mm)</b>	50	51	76	76	64	74
<b>Depth – Back (mm)</b>	N/A	N/A	97	N/A	N/A	N/A

### Downpipe Diameters

<b>Diameter (mm)</b>	61 (Square)	68 (Circular)	82 (Circular)	110 (Circular)
<b>Outside Diameter – Min. (mm)</b>	60.60	68.3	82.4	110.0
<b>Outside Diameter – Max. (mm)</b>	61.40	68.7	82.8	110.4
<b>Wall Thickness – Min. (mm)</b>	1.45	1.8	3.2	3.2
<b>Wall Thickness – Max. (mm)</b>	1.75	2.1	3.5	3.5

#### Gutter Capacities – Maximum Effective Roof Area (m<sup>2</sup>)

	Running Outlet at End of Gutter		Running Outlet at Centre of Gutter		Stopend Outlet at End of Gutter	
System	Gutter Laid Level	Gutter Laid at Fall (1:600)	Gutter Laid Level	Gutter Laid at Fall (1:600)	Gutter Laid Level	Gutter Laid at Fall (1:600)
RoundLine	63	79	126	163	60	60
SquareLine	67	96	149	178	63	63
StormLine (Square Downpipe)	117	130	228	254	63	63
StormLine (Circular Downpipe)	115	125	221	239	61	61
DeepLine	114	145	228	299	–	–
SuperLine	101	121	207	250	–	–
RoofLine	119	164	245	317	–	–

#### Ultraviolet Light

Wavin Osma Rainwater systems gutter, pipe and fittings are resistant to the effects of ultraviolet light. Although the colour may fade slightly after a number of years exposure to strong sunlight, no integral damage occurs.

#### Life Expectancy

The life expectancy of Wavin Osma Rainwater systems is in excess of 50 years.

#### Approvals

Wavin Osma Rainwater systems comply, where applicable, with the requirements of the following British Standards:

- BS 6209: 1982 Solvent cement for non-pressure thermoplastics pipe systems
- BS 1329-1: 2000 Plastics piping systems for soil and waste drainage
- BS EN 607: 2004 Eaves, gutters and fittings made of PVC-U definitions, requirements and testing.
- BS EN 1462: 2004 Brackets for eaves gutters: requirements and testing.
- BS EN 12200-1: 2000 Plastics rainwater piping systems for above ground external use – unplasticized Poly Vinyl Chloride (PVC-U) – Part 1 specification for pipes, fittings and the system.

#### Installation

The respective current codes of practice must be observed in the installation of Wavin Osma Rainwater systems.

These systems are to be assembled only by trained and qualified professionals and with appropriate tools only.

### Gutter Support

The gutter should be supported as follows:

- At maximum centres of 1m
- Within 150mm of both sides of any angle
- At the center of gutter joints

All Wavin Osma Rainwater systems are designed to withstand the weight of snow likely from normal falls.

However, in areas subject to heavy snowfalls, the distance between support brackets should be reduced to 600mm and it is recommended that brackets are used with three fixing points, and all three fixing points are used.

### Multi-screw Brackets

For brackets where multi-screw holes are provided, we recommend that all three are used. Although the central fixing hole is sufficient (and must be always used), use of all three fixing holes protects against extreme weather conditions.

Use of all screw holes in the multi-screw fixings is particularly recommended on high buildings and in areas exposed to strong winds.

### Thermal Movement

All fittings must be firmly secured to counter the effects of accumulated thermal movement.

Allowance for thermal expansion must be made when fixing the gutter. Gutter joint fittings have a line marking the position to which the gutter should be inserted.

A gutter jointing bracket or gutter union with bracket should be fitted within 300mm from the end of terminal lengths of gutter.

### Downpipe Support

Pipe should be supported in accordance with the below table which shows the maximum support centres for pipes installed vertically and horizontally.

Pipe Diameter (mm)	Vertical Fixing Interval (m)	Horizontal Fixing Interval (m)
61	2.0	1.0
68	2.0	1.0
82	2.0	1.0
110	2.0	1.0

## **Storage**

Always store gutter or pipe on a reasonably flat surface free from sharp projections.

Block bundles can be stored up to 3m high without extra side supports or bearers. Block bundles will remain freestanding when cut. Take care when releasing bundles as the straps are under considerable tension and may flail when cut.

Loose gutter or pipe requires side supports at least every 2m. These supports should consist of battens at least 75mm wide.

Ideally, support loose gutter or pipe uniformly throughout its entire length. If this is not possible, place timber supports at least 75mm wide at 1m maximum centres beneath the gutter or pipe.

Store fittings supplied in plastic bags away from direct sunlight. If this is not possible, open bags to prevent a build-up of temperature.

## **Contact Details**

### **Registered Office**

Wavin UK  
Edington Lane  
Doncaster  
South Yorkshire  
DN12 1BY

Tel: 01709 856300

Web: <https://www.wavin.com/en-gb>

### **Technical Advisory Service**

Tel: 0800 0380088

Email: [technical.design.uk@wavin.com](mailto:technical.design.uk@wavin.com)