



GUTTER

DESIGN OF GUTTERS AND DOWNPIPES FOR TYPICAL
STRUCTURES
DESIGN | G03

Summary

The module designs gutters and downpipes that drain the roofs of building structures.

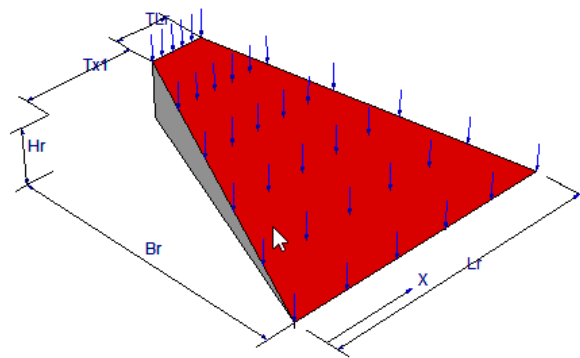
What makes this module special?

- Sizes gutters and downpipes
- Range of rainfall settings
- Clear results visualisation

Detailed Description

Using the requirements of BS EN 12056-3-2000, the module design gutters and down pipes that drain roofs of building structures for specified rainfall intensities and design durations. The rainfall intensities can optionally be picked from a list of regions in the United Kingdom and South Africa. **Gutter** offers a 3D visualisation of the roof segment under analysis, and a roof and gutter draining diagram eases result interpretation.

Effective roof area: 0.00m²
No allowance made for wind, rain falling vertically



Two minute M5 rainfall constants

United Kingdom **South Africa**

Values in mm

London	4.0	Birmingham	3.5	Edinburgh	2.0	Exeter	2.0
Liverpool	3.5	Sheffield	3.5	Southampton	3.0	Dublin	2.0
Plymouth	3.0	Manchester	3.5	Newcastle	3.0	Leeds	3.5
Aberdeen	2.5	Glasgow	2.5	Belfast	2.5	Bristol	3.5

Close



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The outflow characteristics of each gutter segment and down pipe are summarised in tabular form and detailed design calculations are also provided.

Gutter Only Summary Table:

Area -> downpipe	Rain intensity	Catchment Area	Design flow	Upstream depth	Downstream depth	Required Fb	G depth	Status
A1 -> G	0.104l/(s.m ²)	2.500m ²	0.260 l/s	23 mm	11 mm	0 mm	80 mm	OK
A2 -> G	0.104l/(s.m ²)	14.500m ²	1.508 l/s	73 mm	35 mm	0 mm	80 mm	OK

Downpipe Summary Table:

Downpipe	Outflow	Shape	Minimum required dimensions			With given dimensions				Type of flow		Status
			w,b,d	h	l	h,Φ	b	DS:(h)	US	gutter	outlet	
Dnp 1	1.768 l/s	Circular	50 mm	-	Orifice	60 mm	-	30 mm	58 mm	Free	Weir	OK
		Rectangular	45 mm	45 mm	Orifice	60 mm	60 mm	26 mm	50 mm	Free	Weir	OK

Supported Design Codes

Design Codes

- BS EN 12056-3 – 2000