

# Marley Magnum® Spouting and Downpipe System

Marley New Zealand uPVC spouting and downpipe systems are designed for the collection and discharge of rainwater from roof areas.

Magnum® Spouting Systems:

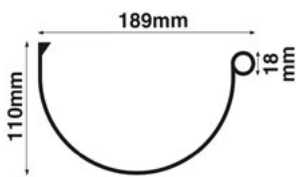
- › Large half-round spouting profile. Flow capacity of 250 litres per minute.
- › Suitable for light commercial roof areas.
- › External brackets for ease of maintenance.
- › One size fits all. From farm sheds, warehouses, schools and churches, to hotels and sports stadiums.

**Colours available:**



Grey

## Technical Details – Magnum® Spouting



**Effective Cross Sectional Area:** 14,300mm<sup>2</sup>

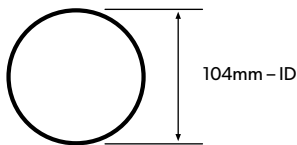
**Flow Capacity:** 250 litres/minute

**Material:** uPVC (Unplasticised PVC)

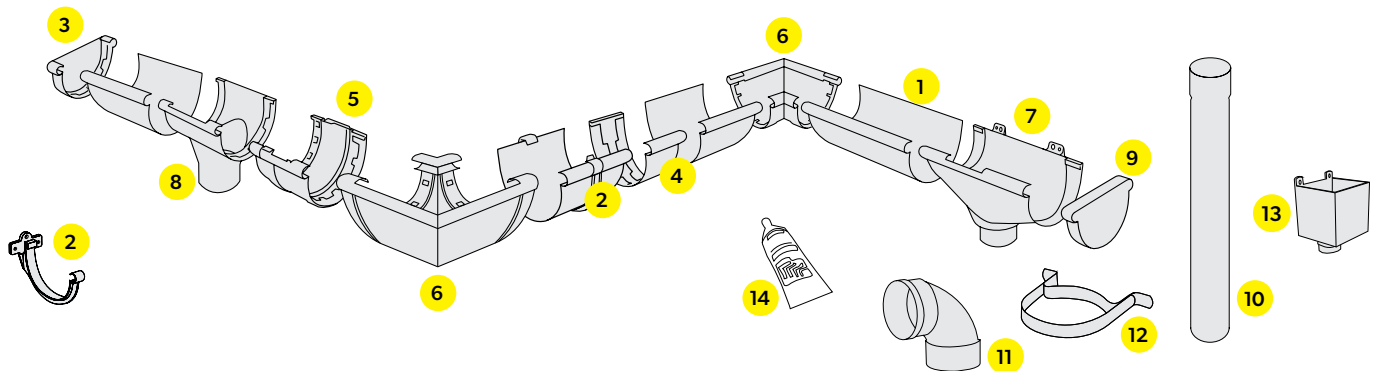
**Minimum Recommended Fall:** 1:667 i.e. 15mm per 10m of spouting

**Bracket System:** External brackets. To be spaced at max 500mm centres (reduce to 300mm in high wind or snow prone areas).

## Technical Details – Magnum® Downpipe



## Components of the system



**Table 1:** System Components

COMPONENT	GREY
1 Magnum Spouting 4m Length	MAG1.4
2 Magnum External Bracket	MAG2E
3 Magnum Universal Spouting Stopend	MAG9
4 Magnum Spouting Joiner	MAG5
5 Magnum Expansion Joiner	MAG17
6 Magnum 90° Angle	MAG6
7 Magnum Expansion Outlet 100mm	MAGE8.100
8 Magnum Dropper Outlet 100mm	MAG8.100
9 Magnum Universal Outlet Stopend	MAG8
10 Magnum Downpipe 100mm 4m Length	RP100.GY.4
11 Magnum 88° Socket Bend 100mm	RB2.100.GY
12 DWV Holderbat Pipe Clip 100DN	140.100HB
13 Magnum Rainhead 100mm	MAGRH.100
14 Solvent Welding Cement Grey 180g Tube	MCS.GY
Internal/External Special Spouting Angle	MAG.ANGLE

Most of the products mentioned in Table 1 are manufactured by Nicoll France, Aliaxis.

## Manufacturer

### Nicoll France

- › 37 Rue Pierre et Marie Curie, 49300 Cholet, France
- › [www.nicoll.fr](http://www.nicoll.fr)
- › [communication.nicoll@alixis.com](mailto:communication.nicoll@alixis.com)

## Others

### Bostik New Zealand Ltd

- › 19 Eastern Hutt Road, Wingate, Lower Hutt, Wellington 5019
- › [www.bostik.com](http://www.bostik.com)
- › [nzsales@bostik.com](mailto:nzsales@bostik.com)

### Marley New Zealand Limited

- › 32 Mahia Rd, Manurewa, Auckland – New Zealand
- › 0800 627539
- › [www.marley.co.nz](http://www.marley.co.nz)
- › [info@marley.co.nz](mailto:info@marley.co.nz)

## Relevant Building Code Clauses

Magnum® Spouting and Downpipe System when used, installed, and maintained in accordance with the requirements outlined in this document, will meet or contribute to meeting:

- › NZBC Clause B2: Durability. Exceeds the requirement NZBC B2.3.1 d) 5 years.
- › NZBC Clause E1: Surface Water. Meets the requirements for NZBC E1.3.3 (a), (b), and (d).
- › NZBC Clause F2: Hazardous Building Materials. Meets this requirement and will not present a health hazard to people.

## Limitations on the use

Marley uPVC spouting and downpipe systems are suitable **ONLY** as external spouting and downpipes and are **NOT** suitable for use as a concealed system or as an internal spouting and downpipes system.

## Guarantee

Marley guarantees the purchaser of Marley spouting or downpipe products against defects in material and manufacture for a period of 15 years from the original date of purchase. For more information refer to [Marley Guarantee](#).

## Design Spouting

- › All the dimensions on the spouting mentioned in the “Marley Design Details” are nominal.
- › Each Marley spouting system has a different flow capacity and cross-sectional area.
- › Marley recommends reducing the bracket spacing from 500mm maximum for areas subjected to high wind or occasional snowfall.
- › Over time the components of the Marley spouting and downpipe system will weather. Weathering of the external surfaces does not affect the long-term durability of the system.

For more information refer to [Marley Spouting Systems Design Details](#).

## Design Downpipe

### Flow Characteristics

Marley uPVC spouting and downpipe systems have been designed to optimise the discharge of water. Selection of spouting profile and downpipe size is dependent upon the roof catchment area and the rainfall intensity for the region where the product is being installed. Applying fall to the spouting improves the flow and the location of the downpipe outlets can also influence the flow. The NZBC Clause E1 - Surface Water references downpipes and spouting in Acceptable Solution Clause 4.

MARLEY PRODUCT	DOWNPIPE SIZE	ROOF PITCH			
	Minimum internal size	0° - 25°	25° - 35°	35° - 45°	45° - 55°
Magnum® (ID: 104mm)	100mm diameter	155	130	110	90

Table is based on BRANZ Bulletin - Issue 509

## Installation

### A. Planning and Preparation

- › Establish the following:
  - › Downpipe/spouting outlet locations.
  - › Thermal expansion relief points.
  - › Spouting and downpipe lengths required.
  - › Fittings required.
- › Determine which direction the installation will be completed as the spouting must fall towards the outlets. Components should be solvent welded one after the other working in one direction. Use only Marley MCS solvent cement to ensure a watertight system.
- › Roof overhang should be no less than 50mm.
- › Marley spouting system allow for the thermal expansion of uPVC using expansion outlets and expansion joiners.

### B. Spouting installation

- › Marley recommends a minimum fall to the outlet of 5mm per 10m.
- › Brackets must be secured to the fascia with a maximum spacing of 500mm. In high wind or snow prone areas reduce spacing to 300mm maximum.
- › Use a minimum of 3 fixings per bracket.
- › Expansion outlet: Set up the string line so that the bottom edge of the spouting brackets are aligned with the string line. Mark the position of the expansion outlet on the fascia. Fix the expansion outlet to the fascia using the side fixing tabs to align with the string line. The spouting is clipped into the expansion outlet.
- › Different scenarios may apply to any given job including:
  - › Spouting run to an expansion outlet.
  - › Spouting run with an expansion joiner.
  - › Spouting run to dropper outlet.

## C. Downpipe Installation

- › Prior to connecting downpipes, ensure spouting outlets have been installed as per spouting installation instructions.
- › When measuring downpipe lengths for cutting, allow for the socket or spigot depth of any components such as outlets, bends, and joiners.
- › Use a plumb line to mark where the downpipe will sit against the wall and mark the positions of the downpipe clips as per the following sections.
- › Note: Magnum® downpipe is socketed at one end so joiners are not required to join two or more lengths of pipe.
- › The downpipe assembly should be solvent jointed together using only colour matched Marley MCS solvent cement.
- › However, the downpipe assembly should not be glued to the spouting outlet. It should be screwed to the outlet with a stainless-steel screw. This allows for easy removal for maintenance or repair.
- › In accordance with the relevant codes, downpipe can be connected to a stormwater or surface outlet, or access pit. Do not connect downpipe to a wastewater gully trap.

## D. Installing downpipe clips

### Downpipe clip options

For strength, Magnum® downpipe should always be installed with Marley's 100DN Aluminium Holderbat Clips.



### For vertical downpipe installation

Place the top downpipe clip a maximum of 200mm from the bend or outlet. Ensure the second and subsequent clips are spaced no more than 2m apart.

### For horizontal downpipe installation

Place the first downpipe clip no more than 200mm from the bend or junction. Ensure the second and subsequent clips are no more than 1.2m apart. Horizontal downpipe should always be installed with a fall away from the spouting.

For more information refer to [Magnum Spouting Brochure](#).

## Maintenance requirements

- › If spouting is at height or difficult to access, consider consulting a professional installation or maintenance company.
- › Check brackets, they should not be spaced no more than 500mm apart.
- › Check that fall is no more than 0.5mm per 1m.
- › Clear debris.
- › Check expansion joiner seal (where an expansion joiner has been used).
- › Wash your Marley spouting system at least once a year.

For more information refer to [Marley Rainwater Systems Maintenance Schedule](#).

## Warning and/or Bans

Magnum® system is not subject to any warning or ban.