# **Marley Stormcloud® Spouting System**

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

Stormcloud® Spouting:

- > Versatile quarter-round profile.
- Suits both traditional and contemporary homes.
- Internal brackets.
- Designed for the efficient flow of rainwater when used in conjuntion with Marley's RP80 $^\circ$  80mm round downpipe system.
- Stormcloud spouting can also be used with RP65° 65mm round downpipe and rectangular downpipes (65x50mm or 100x50mm).

#### **Colours available:**



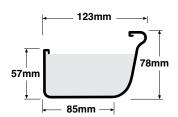








## **Technical Details** – Stormcloud® Spouting

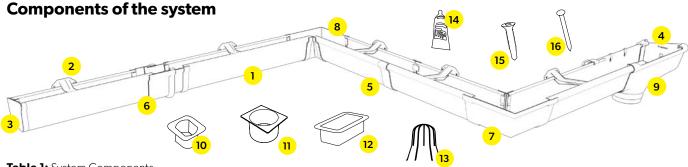


Effective Cross Sectional Area: 5100mm<sup>2</sup>

Flow Capacity: 70 litres/minute Material: uPVC (Unplasticised PVC)

Minimum Recommended Fall: 1:2000 (0.5mm per 1m)

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



**Table 1:** System Components

COMPONENT	WHITE	GREY FRIARS®	IRONSAND®	BLACK	FLAXBLACK®
1 Stormcloud Spouting 5m Length	MS1.5				
1 Stormcloud Spouting 4m Length		MS1.4.GYF	MS1.4.IRO	MS1.4.BLK	MS1.4.FXB
1 Stormcloud Spouting 3m Length	MS1.3				
1 Stormcloud Spouting 1.5m Length	MS1.REPAIR				
2 Stormcloud Bracket	MS2	MS2.GYF	MS2.IRO	MS2.BLK	MS2.FXB
3 Stormcloud Left Hand Stopend	MS3	MS3.GYF	MS3.IRO	MS3.BLK	MS3.FXB
4 Stormcloud Right Hand Stopend	MS4	MS4.GYF	MS4.IRO	MS4.BLK	MS4.FXB

COMPONENT	WHITE	GREY FRIARS®	IRONSAND*	BLACK	FLAXBLACK®
5 Stormcloud Joiner	MS5	MS5.GYF	MS5.IRO	MS5.BLK	MS5.FXB
6 Stormcloud Expansion Joiner	MS17	MS17.GYF	MS17.IRO	MS17.BLK	MS17.FXB
7 Stormcloud External Angle 90°	MS6	MS6.GYF	MS6.IRO	MS6.BLK	MS6.FXB
8 Stormcloud Internal Angle 90°	MS7	MS7.GYF	MS7.IRO	MS7.BLK	MS7.FXB
9 Stormcloud Expansion Outlet 65mm	MS8.65	MS8.65.GYF	MS8.65.IRO	MS8.65.BLK	MS8.65.FXB
9 Stormcloud Expansion Outlet 80mm	MS8.80	MS8.80.GYF	MS8.80.IRO	MS8.80.BLK	MS8.80.FXB
10 Dropper Outlet 65mm	MC11.65				
11 Dropper Outlet 80mm	MC11.80	MC11.80.GYF	MC11.80.IRO	MC11.80.BLK	MC11.80.FXB
12 Dropper Outlet 100 X 50mm	MC11.100.50				
Outlet Strainer	RWST	RWST	RWST	RWST	RWST
14 Solvent Welding Cement 180g Tube	MCS	MCS.GYF	MCS.IRO	MCS.BLK	MCS.FXB
15 Bracket Screws for Metal Fascia	SCREW.METAL	SCREW.METAL	SCREW.METAL	SCREW.METAL	SCREW.METAL
16 Bracket Nails	MCNAILS	MCNAILS	MCNAILS	MCNAILS	MCNAILS
Special Spouting Angle - Flat	MSSPEC.F	MSSPEC.F.GYF	MSSPEC.F.IRO	MSSPEC.F.BLK	MSSPEC.F.FXB
Special Spouting Angle - Rake	MSSPEC.R	MSSPEC.R.GYF	MSSPEC.R.IRO	MSSPEC.R.BLK	MSSPEC.R.FXB

Most of the products mentioned in Table 1 are manufactured by Marley NZ, however some of them may be sourced from reputable companies.

## Manufacturer

#### **Marley New Zealand Limited**

- 32 Mahia Rd, Manurewa, Auckland – New Zealand
- > 0800 627539
- > www.marley.co.nz
- > info@marley.co.nz
- > NZBN: 9429038863431

## **Others**

## **Bostik New Zealand Ltd**

- 19 Eastern Hutt Road, Wingate, Lower Hutt, Wellington 5019
- > www.bostik.com
- nzsales@bostik.com

## **Anzor Fasteners Ltd**

- 93 Apollo Drive, Albany, Auckland
- > www.anzor.co.nz
- > alan@anzor.co.nz

#### **NZ Nail Industries Ltd**

- 809A Great South Road, Mount Wellington, Auckland 1643
- > www.nznails.co.nz
- > accounts@nznails.co.nz

# **Relevant Building Code Clauses**

The Stormcloud® Spouting 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 c) 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.

## **Quality Assurance**

Product batch release testing is conducted by Quality Control systems according to manufacturing standards at the site of manufacture. All product compliance validation is conducted at the Marley IANZ Registered Laboratory (IANZ 92).

## 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 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 <u>Marley Guarantee</u>.



## Design

- > All the dimensions referenced are nominal.
- > Each Marley spouting system has a different flow capacity and cross-sectional area.
- > Marley recommends reducing the bracket spacing to 300mm maximum for areas subjected to high wind or occasional light 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.
- > All Marley spouting systems feature a high front face and maintain a 10mm gap between the back face of the gutter and the fascia board so that water is able to overflow over the back face without entering the building envelope.

For more information refer to Marley Spouting Systems Design Details.

## 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 systems 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 areas prone to light snowfall, reduce spacing to 300mm maximum.
- > Use a minimum of 3 fixings per bracket.
- > Use only Marley MCS solvent cement.
- > 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. Do not glue.
- 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.

For more information refer to Marley Stratus Design Series – Design and Installation Guide Section 4.

## **Maintenance requirements**

- > If spouting is at height or difficult to access, consider consulting a professional installation or maintenance company.
- $\,\,\boldsymbol{\rangle}\,\,$  Check brackets, they should 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.
- > If painting white spouting. Thoroughly clean surface. Apply one coat of acrylic undercoat, followed by one coat of acrylic topcoat. Apply a second top coat if necessary. Use only light colours.

For more information refer to  $\underline{\mathsf{Marley}}\, \mathsf{Rainwater}\, \mathsf{Systems}\, \mathsf{Maintenance}\, \mathsf{Schedule}.$ 

# Warning and/or Bans

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

