

Marley Magnum

Half round PVC commercial spouting



Rainwater Solutions

 **MARLEY**

Marley Magnum commercial spouting is a rugged half round PVC solvent cement system, designed for the collection and conveying of rainwater, which complies with E1 surface water and B2 durability requirements of the New Zealand Building Code.

Marley Magnum is ideally suited to collect rainwater from large roof areas in commercial, agricultural and domestic applications that include:

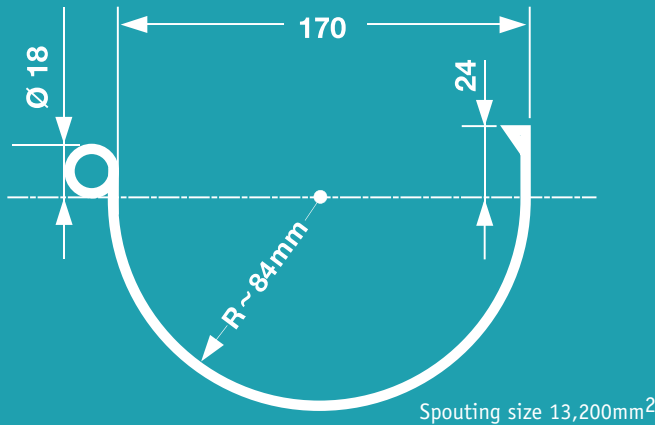
- All farm utility buildings
- Warehouses
- Sports stadiums
- Educational facilities
- Multi storeyed dwellings
- Large domestic dwellings
- Correctional facilities
- Retirement villages
- Motels

Features and Benefits

- Rugged solvent cement PVC system
- Half round profile
- Fast & simple to install
- Won't rust or rot
- Cost effective & long lasting
- Great for coastal locations
- Low maintenance- external brackets lend to ease of clearing debris
- Large roof area drainage

Colour

Light Grey AS2700 N33



Installation

Determine the Number of Downpipes

Calculate the roof area and check the ARI (Average Rainfall Intensity) for your area to select the number of downpipes required (reference to Building Code E1 surface water).

See table below for roof area coverage per one 100mm downpipe, based on rainfall intensity of 100mm/hr.

ROOF PITCH	ROOF AREA	EXAMPLE Roof area of 450m ² ARI of 100mm/hr 0 - 25° roof pitch 3 x 100mm downpipes required
0 - 25°	150m ²	
25 - 35°	125m ²	
35 - 45°	100m ²	
45 - 55°	80m ²	

Establish the Location of Downpipes and Outlets

Where possible, position the outlet in the middle of each run of spouting to gain maximum efficiency (ensuring they are clear of access ways and windows) so the maximum length of spouting to the outlet is 12 metres. The outlet should be positioned at the lowest point of fall.

Calculate Spouting Fall

Marley Magnum should be installed with 1.5mm fall per metre (or 15mm per 10m of spouting). Fix the end bracket first as high as practical and run a stringline from the base of the bracket to the outlet to ensure an even fall.

Fixing Brackets

Install brackets at 500mm intervals. In high wind and snow load areas reduce the bracket spacing to 300mm.

Position the first bracket as high as practical under the roof to ensure that the water will fall into the spouting. Fix the brackets with No10 plated or Stainless Steel round head hold fast screws (30mm minimum in length) into the fascia or rafter end. Fit the brackets true to allow the gutter to freely slide in the support brackets.

Expansion Allowance

When a run of spouting exceeds 12 metres, expansion allowance is required to accommodate thermal movement. Expansion can be allowed for by either installing a downpipe Expansion Outlet (MAGE8.100) or an Expansion Joiner (MAG17).

If the number or location of downpipes and therefore Magnum Expansion Outlets is restricted (i.e. are not every 12 metres) an Expansion Joiner needs to be installed.

The Expansion Joiner has a sliding rubber seal (gasket) which accommodates the movement of the spouting. The rubber gasket inside the MAG17 can be removed for cleaning by unsnapping the front retaining lug of the moulded unit. Lubricate the gasket with silicon grease after cleaning before reassembling.

To install a Magnum Expansion Joiner set bracket spacing at 400mm, the Expansion Joiner is to be installed mid distance between these brackets.

Solvent Cement the Magnum Spouting into one side of the Expansion Joiner (refer to the Marley Solvent Cement procedure below) and insert into previously installed brackets. Set the expansion joiner using the graduated settings marked on the inside of the base of the fitting according to the temperature at the time of the installation, using the "key to temperature graduation" table set out below. It is important that the fitting is set in the right position for it to function correctly.

Key to temperature graduation

Hot: When the temperature of the day is considered to be 10° C above the average temperature.

Average: When the temperature is average; In New Zealand the average temperature condition is considered to be 16 - 18° C.

Cold: When the temperature of the day is considered to be 10°C below the average temperature conditions.

Determine the length of the next piece of spouting. Solvent Cement this length of spouting into the other side of the Expansion Joiner, ensuring the joiner is still set at the correct temperature position.

For spouting runs exceeding 12 metres in length fix the top back edge of the spouting with a SS No6x40 screw to the fascia an equal distance between expansion fittings.

Cutting

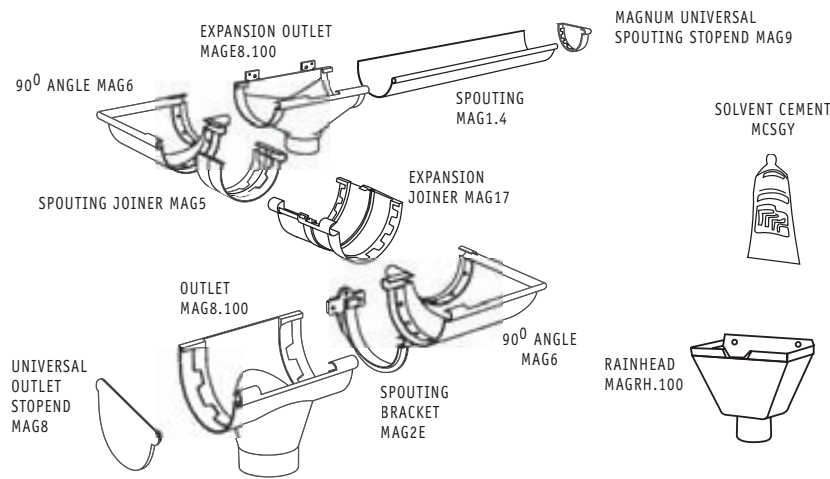
Use a square to mark across the top of the gutter and an A4 sheet of paper to mark around the spouting before using a fine tooth hacksaw to cut the spouting. Remove the burrs from the cut edge before solvent welding into position.

Solvent Welding

Only "Marley Solvent Cement" (MCS.GY) should be used when installing Marley Magnum Spouting. The surface areas to be joined must be clean, dry and free from burrs. The solvent cement must be evenly applied to both surfaces. Once the joint has been completed, unnecessary movement should be avoided for 10 minutes. Any surplus solvent on the exterior surface should be removed immediately with a clean, lint free cloth.

Magnum solvent assembly spouting system















A rugged half round PVC solvent cement system, which is ideally suited to collect rainwater from large roof areas in commercial, agricultural and domestic applications.



Cross-sectional area 13,200mm²



MAGNUM SOLVENT ASSEMBLY SPOUTING COMPONENTS

COMPONENT	CODE	PRODUCT	USAGE	QTY	UNIT PRICE	TOTAL	BARCODE
MAGNUM SPOUTING 4m Length GREY	MAG1.4		4m Lengths as required				9 414661 191235 >
MAGNUM SPOUTING BRACKET GREY	MAG2E		Allow 1 bracket for every 500mm of spouting				9 414661 191297 >
MAGNUM UNIVERSAL SPOUTING STOPEND GREY	MAG9		One per LH or RH spouting end				9 414661 191280 >
MAGNUM SPOUTING JOINER GREY	MAG5		To join lengths of spouting				9 414661 191242 >
MAGNUM EXPANSION JOINER GREY	MAG17		Allow 1 every 12m of spouting if no expansion outlet				9 414661 191334 >
MAGNUM 90° ANGLE GREY	MAG6		Use for 90 degree internal/external corners				9 414661 194168 >
MAGNUM EXPANSION OUTLET 100mm GREY	MAGE8.100		Compatible with RP100.GY.4				9 414661 191259 >
MAGNUM OUTLET 100mm GREY	MAG8.100		Compatible with RP100.GY.4				9 414661 191266 >
MAGNUM UNIVERSAL OUTLET STOPEND GREY	MAG8		For converting outlets to stopend outlets				9 414661 197961 >
ROUND DOWNPIPE 100mm 4m Length GREY	RP100.GY.4		4m Lengths				9 414661 194298 >
88° SOCKET BEND 100mm GREY NB: Socketed at one end	RB2.100.GY		For 88 degree angles (under soffits)				9 414661 194304 >
PIPE CLIP SADDLE - ALUMINIUM	140.100HB		Allow one for every 2 metres of downpipe				9 414661 164581 >
MAGNUM RAINHEAD GREY	MAGRH.100		As required				9 414661 191341 >
WELDING SOLVENT GREY	MCS.GY		1 per 10 - 15 metres of spouting				9 414661 154575 >

TOTAL COST
(inc GST)



Downpipes

Fit Downpipe brackets at 2 metre spacings for vertical pipes and 1.2 metres for graded pipes.

Quality Guaranteed

Marley PVC Rainwater Systems Consumer Guarantee

Product Info

- Marley PVC Rainwater Systems are suitable as an external spouting and downpipe system exceeding the requirements of NZBC clause B2.3(d) when correctly designed and installed.
- If Marley PVC Rainwater Systems are to be used in any application not covered by the current Marley brochure, written confirmation of suitability should be obtained from Marley.
- Over time there may be some chalking and colour change as is customary with all exterior pigmented finishes. This will not affect the long-term durability of your Marley PVC Rainwater System. Chalking can be removed by periodic washing with warm soapy water.
- Important: Only Marley fittings and Marley Solvent Cement (MCS.GY) should be used in conjunction with Marley spouting and downpipes to ensure the integrity of the completed system. Failure to use Marley fittings will deem the guarantee invalid.

Consumer Guarantee

- Subject to the above product information, if Marley PVC Rainwater Systems are used and installed strictly according to Marley's published installation instructions we guarantee the PVC Rainwater System to be free from defects in material and manufacture for a period of 15 years from the date of purchase.
- If you consider that our guarantee has not been fulfilled, do not attempt repairs or replacement, but contact Marley New Zealand Limited, Private Bag 802, Manurewa, Auckland with evidence of the product purchase date. Marley will then institute timely inspection of the installation.
- If the Marley PVC Rainwater System has been used and installed in accordance with the requirements of this guarantee (set out above) but does not comply with that guarantee, we will provide replacement product or refund its original purchase price.
- This guarantee is given to consumers as defined in and who have the rights under the Consumer Guarantees Act 1993 and should be read with the statutory consumer guarantees contained in that Act.

DISCLAIMER

This brochure has been compiled by Marley New Zealand Ltd ("The Company") to promote better understanding of the technical aspects of the Company's products to assist users in obtaining from them the best possible performance. The brochure is supplied subject to acknowledgment of the following conditions: The brochure is protected by Copyright and may not be copied or reproduced in any form or by any means in whole or in part without prior consent in writing by the Company. Product specifications, usage data and advisory information may change from time to time with advances in research and field experience. The Company reserves the right to make such changes at any time without notice. Correct usage of the Company's products involve engineering judgements which cannot be properly made without full knowledge of all the conditions pertaining to each specific installation. The Company expressly disclaims all and any liability to any person whether supplied with this publication or not in respect of anything and of the consequences of anything done or omitted to be done by any such person in reliance whether whole or partial upon the whole or any part of the contents of this brochure. No offer to trade, nor any conditions of trading, are expressed or implied by the issue or content of this brochure. Nothing herein shall override the Company's Conditions of Sale, which may be obtained from the Registered Office or any Sales Office of the Company. This brochure is and shall remain the property of the Company, and shall be surrendered on demand to the Company.

AUCKLAND

Mahia Road, Manurewa,
Private Bag 802 Manurewa
Sales Department: Telephone 09 279 2777
Direct Fax 09 279 2778 Freefax 0800 652 621
Head Office: telephone 09 279 2799
Fax 09 279 2798
Sales Hotline: 0800 222 922

CHRISTCHURCH

Shands Road, Hornby, PO Box 16233 Christchurch
Sales Hotline: 0800 222 922

For further information: **0800 MARLEY** (0800 627 539) www.marley.co.nz

an *Aliaxis* company

www.marley.co.nz

 **MARLEY**