

MARLEY SPOUTING AND DOWNPIPE SYSTEMS

YOUR EASY INSTALLATION GUIDE

INSTALL, PAINT, REPAIR AND
MAINTAIN YOUR SPOUTING
AND DOWNPIPE



ABOUT MARLEY

Marley spouting and downpipes have been produced for New Zealand conditions for over 40 years. The Marley spouting and downpipe systems offer clean lines and a smart finish that will enhance the look of your home and protect it against nature's elements.

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**U.V.
RESISTANT**



**100%
RECYCLABLE**



WON'T RUST



**15 YEAR
GUARANTEE**



PAINTABLE

THE BENEFITS OF CHOOSING MARLEY

- 15 year guarantee on all Marley spouting and downpipe products
- All Marley manufactured products are 100% recyclable
- Won't rust, rot or corrode even in salt affected areas
- Resilient in high wind and snow prone areas
- UV stabilized
- Marley is an ISO registered manufacturer - ISO14001 & ISO9001

NEED AN INSTALLER?

Contact your nearest Marley stockist for an installer. To find your nearest stockist visit www.marley.co.nz

SAFETY PRECAUTIONS

- Always keep tools and materials away from children
- Read the instructions before beginning your project
- You may need to seek permission from your local council and/or water and power authorities before beginning the project
- Marley recommend you consult a certified tradesperson before beginning the project, especially where connecting downpipes to Stormwater pipes

TOOLS YOU WILL NEED



- ✓ String line/Chalk line
- ✓ Drill
- ✓ Builders Level
- ✓ Measuring Tape
- ✓ Methylated Spirits
- ✓ Hacksaw – fine tooth PVC saw
- ✓ Marley Solvent Cement
- ✓ Paint – if painting spouting – refer to Paint Section
- ✓ Paint brush
- ✓ Hammer
- ✓ Screwdriver
- ✓ Ladder/Trestle/Planks
- ✓ Pencil
- ✓ Cloth
- ✓ Squarerule
- ✓ Nails/Screws

WHICH STYLE OF SPOUTING IS MINE?

CLASSIC SPOUTING

Based on an original Roman design, the Classic shape is best suited to villa's and traditional colonial style homes. Classic has internal brackets for a smooth finish.

STORMCLOUD SPOUTING

Stormcloud is the perfect spouting for people who wish to retain the existing look of their home while enjoying the low maintenance and long life benefits of uPVC. Stormcloud has a similar shape to traditional quarter round spouting and offers an internal bracket for a smooth finish.

FL2 SPOUTING

The high front edge of FL2 captures large water flow and masks untidy roof edges. The clean face also offers a subtle design to complement any roof line. FL2 is available with internal brackets for a smooth finish or external brackets for ease of cleaning.

TYPHOON SPOUTING

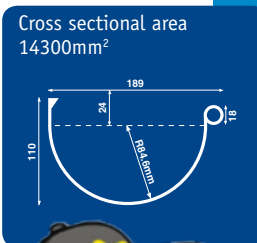
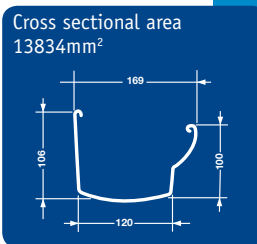
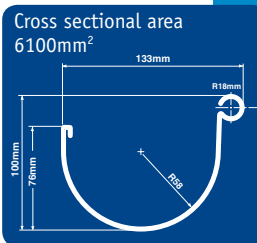
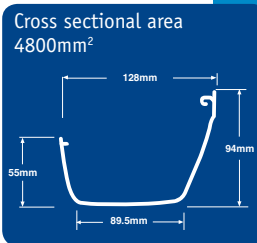
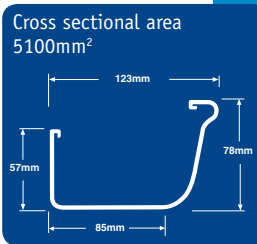
Typhoon's contemporary style with the high front, half-round shape and large capacity allows better water flow and makes cleaning easier. Typhoon comes with internal brackets for a smooth finish or external brackets for ease of cleaning.

OVATION SPOUTING

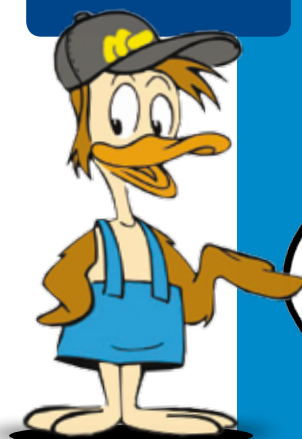
Ovation's smooth design integrates with any architectural style. Designed for optimum hydraulic performance (with unique downpipe) and concealed internal brackets for a smooth finish.

MAGNUM SPOUTING

Magnum is a large capacity rugged half round uPVC spouting system and is ideally suited for large roof areas in residential, commercial and rural applications. Magnum comes in grey with external brackets for ease of cleaning and a 100mm downpipe.



To learn more about the Marley spouting and downpipe systems visit www.marley.co.nz to download product details and watch the video on the Marley spouting range.



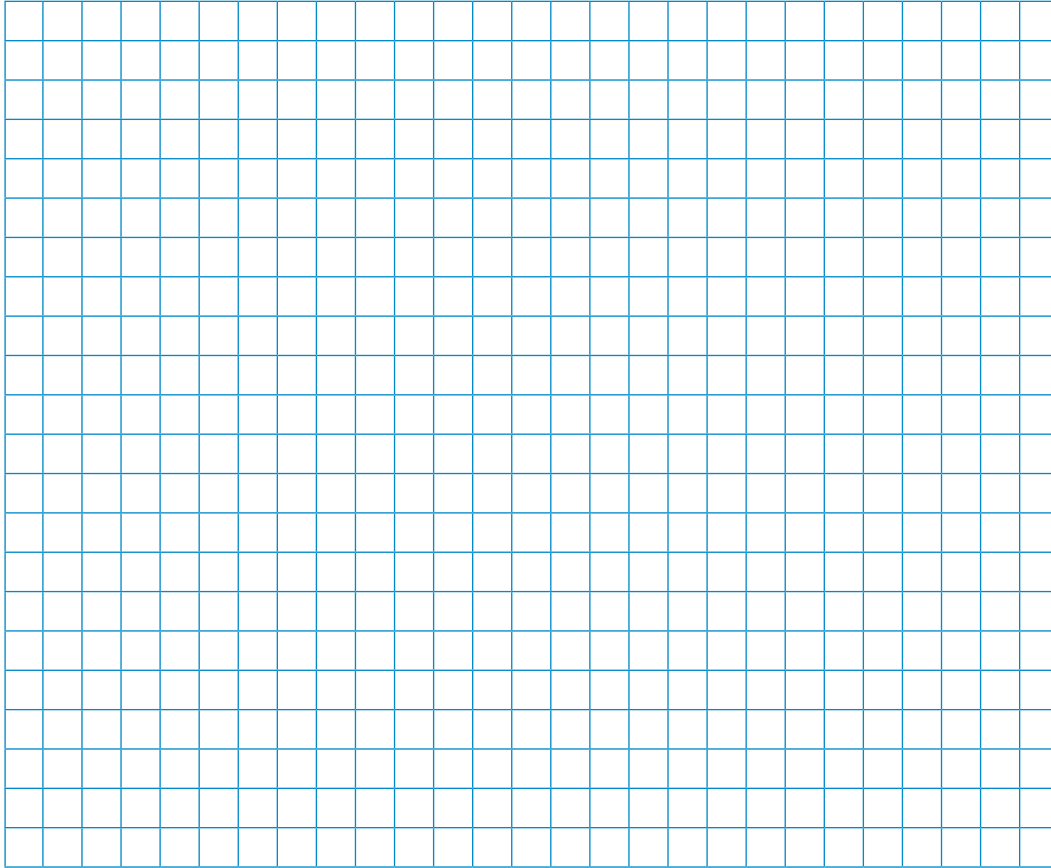
Hi, follow my easy tips throughout this brochure to make installation easier.

WHAT SPOUTING AND DOWNPIPE DO I NEED FOR MY PROJECT?

PLANNING

Use the steps below to calculate which spouting and downpipe you need for your project. Remember that if the profile you want is not available you can have it in-store within 48 hours using Flexipak, the customised ordering service from Marley.

Step 1 - Draw your roof with accurate measurements in the table below.

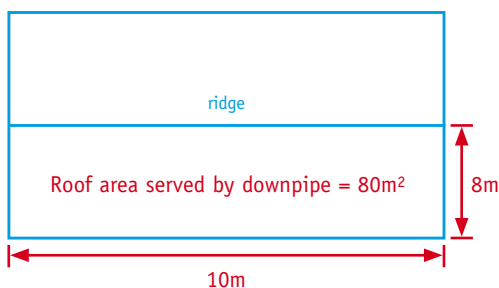


Step 2 - Establish how many downpipes are needed using roof plan table (Fig.B) below.

Roof Pitch	Plan area of roof served by the downpipe in m ²	
	Eclipse/round 65mm/rectangular 65x50mm	Round 80mm/rectangular 100x50mm
0°- 25°	60	100
25°-35°	50	80
35°-45°	40	70
45°-55°	35	60

Fig B Gable End Roof

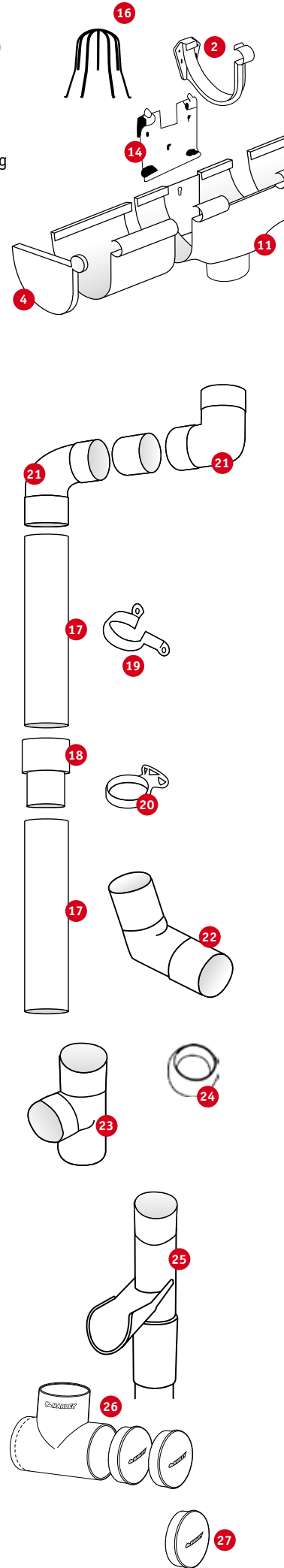
Using the gable end roof example (Fig B) - for a roof area of 80m² and a roof angle of 23°, you will require either of the following downpipe options.

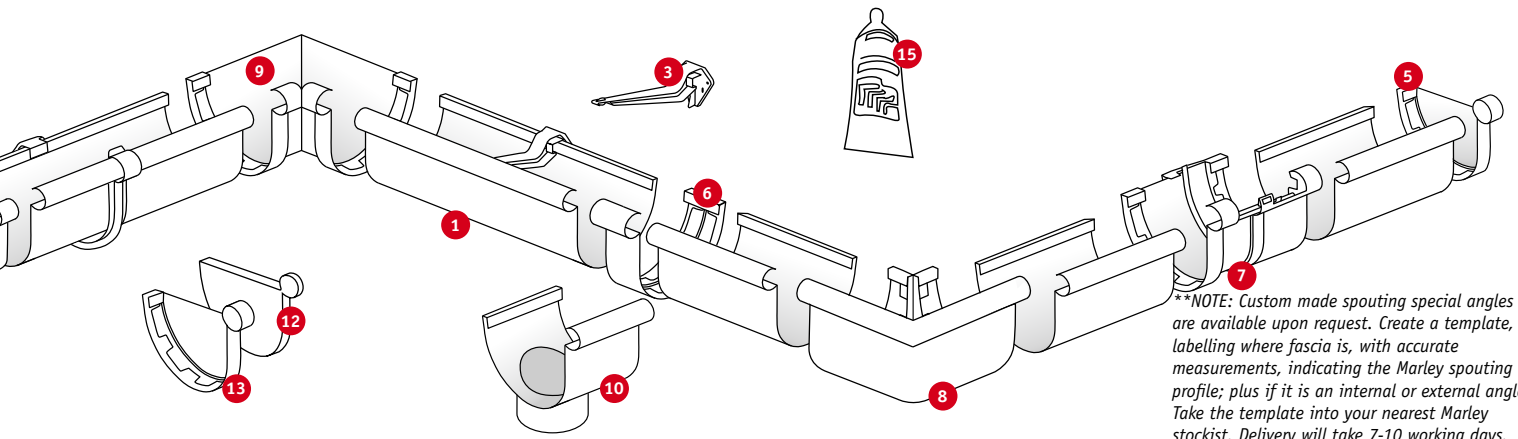


Option 1 - as one round 80mm/rectangular 100x50mm downpipe services a roof area of 100m², then a roof area of 80m² would require one downpipe.

Option 2 - as one eclipse/round 65mm/rectangular 65x50mm downpipe services a roof area of 60m², then a roof area of 80m² would require two downpipes.

**Based on Average Rainfall Intensity of 100mm per hour. (E1-Surface Drainage Building Code 2002)*





SPOUTING - Please circle the product and indicate the quantity you require

Component	Classic	Stormcloud	FL2	Typhoon	Ovation	Magnum	Qty Requirement
1 Spouting 3m length	MC1.3	MS1.3	FL1.3	MT1.3	-	-	
1 Spouting 4m length	-	-	-	-	LG38B	MAG1.4	
1 Spouting 5m length	MC1.5	MS1.5	FL1.5	MT1.5	-	-	
2 External bracket - secure brackets no more than 500mm apart	-	-	FL2E	MT2E	-	MAG2E	
3 Internal/spouting bracket - secure brackets no more than 500mm apart	MC2	MS2	FL2I	MT2I	UBHGB38B	-	
4 Spouting stopend (LH) - left hand stopend for spouting	MC3	MS3	FL3	MT3	UFG38B	MAG9	
5 Spouting stopend (RH) - right hand stopend for spouting	MC4	MS4	FL4	MT4	UFD38B	MAG9	
6 Spouting joiner	MC5	MS5	FL5	MT5	UJNC38B	MAG5	
7 Expansion joiner - use on runs exceeding 10m unless expansion outlet is present	MC17	MS17	FL17	MT17	UJND38B	MAG17	
8 External corner 90°	MC6	MS6	FL6	MT6	UAEC38B	MAG6	
9 Internal corner 90°	MC7	MS7	FL7	MT7	UAIC38B	MAG6	
10 Dropper outlet 65mm - use instead of expansion outlet on short runs	MC11.65	MC11.65	MC11.65	-	-	-	
10 Dropper outlet 80mm - use instead of expansion outlet on short runs	MC11.80	MC11.80	MC11.80	MT11.80	-	-	
10 Dropper outlet 100mm - use instead of expansion outlet on short runs	MC11.100.50	MC11.100.50	MC11.100.50	-	-	MAG8.100	
11 Expansion outlet 65mm - compatible with RP65 & MC16 downpipes	MC8.65	MS8.65	FL8.65	-	-	-	
11 Expansion outlet 80mm - compatible with RP80 & HR80 downpipes	MC8.80	MS8.80	FL8.80	MT8.80	-	-	
11 Expansion outlet 100x 50mm - compatible with MC140 downpipes	MC8.100	MS8.100	FL8.100	-	-	-	
11 Expansion outlet 100mm - compatible with Magnum downpipes	-	-	-	-	-	MAGE8.100	
11 Expansion outlet 105x76mm - compatible with Ovation downpipes	-	-	-	-	UNAD381B	-	
12 Expansion outlet stopend (LH) - left hand stopend for expansion outlet	-	-	FL8.LH	-	UFGC38B	MAG8	
13 Expansion outlet stopend (RH) - right hand stopend for expansion outlet	-	-	FL8.RH	-	UFDC38B	MAG8	
14 Backplate - replacement backplate for expansion outlet	MC8B	MC8B	MC8B	MC8B	-	-	
15 Marley solvent cement (MCS) - 180g tube	MCS	MCS	MCS	MCS	MCS	MCS.GY	
Galvanised nails - 150 per pack	MCNAILS	MCNAILS	MCNAILS	MCNAILS	MCNAILS	MCNAILS	
16 Outlet Strainer	RWST	RWST	RWST	RWST	RWST	RWST	
Ovation cutting template	-	-	-	-	UGAB38	-	
Magnum rainhead	-	-	-	-	-	MAGRH.100	

DOWNPIPES - Please circle the product and indicate the quantity you require

Component	Round 65mm	Round 80mm	Rectangular 65 x 50mm	Rectangular 100 x 50mm	Eclipse	Ovation	Magnum (grey)	Qty Requirement
17 Downpipe 3m length - socketed at one end	RP65	RP80	MC16 (not socketed)	MC140 (not socketed)	HR80 (not socketed)	TD1073B (not socketed)	RP100.GY.4 (4m length)	
18 Downpipe joiner/joining socket	RS65	RS80	MC14	MC149	RH.80.J	UZMGTB	-	
19 Downpipe clip - saddle	RC65	RC80	MC22	MC144	HR.80.C (concealed)	-	-	
20 Downpipe clip - stand-off/2-part	RC65.2	RC80.2	MC22S	MC144S	-	UCOMGTB	140.100HB	
Socket bend - 15 & 45°	-	-	-	MC145 (45°)	-	UCM1GTB (15°)	-	
21 Socket bend - 95°	RB2.65	RB2.80	MC13	MC142	HR.80.950B (outside) HR.80.951B (inside)	UCM8GTB (87°)	RB2.100.GY (88°)	
22 Socket bend - 112°	RB3.65	RB3.80	MC12	-	-	-	-	
Flat bend/reverse face elbow - 85°, 90° & 95°	-	-	-	MC146 (95°)	RH.80.85FB (85°)	UCM9GTB (90°)	-	
Reverse face elbow 45°	-	-	-	MC147	-	-	-	
23 Junction - 95°	RJ65	RJ80	MC20 (112°)	MC148T	-	-	-	
Change of direction - 90°	-	-	MC18	-	-	-	-	
Transition adaptor to round 65mm	-	-	MC19.65	-	-	-	-	
24 Transition adaptor to round 80mm	RA65.80	RAS80 (AHI 80mm)	MC19.80	MC141.80	HR.80.BA	-	-	
Transition adaptor to round 90mm	RA65.90	RA80.90	-	MC141.90	-	UPCU107B	-	
Transition adaptor from round 80mm to Eclipse	-	-	-	-	HR.80.TA	-	-	
25 Downpipe diverter	-	RWDD	-	-	-	-	-	
26 Downpipe spreader kit	-	SKIT80	-	-	-	-	-	
27 End cap	-	CS80	-	-	-	-	-	

HOW DO I INSTALL MY SPOUTING?

Marley spouting and downpipes are intuitively designed as a modular system, making repair and replacement much simpler. There is a technical element to installing Marley spouting. If you are unsure, Marley recommend you seek advice from a trade professional. The steps below are an easy installation guide, for comprehensive installation instructions please visit www.marley.co.nz.



1 Tools and Materials



2 Preparation

Assemble your scaffold and drop cloth around your work area and ensure appropriate safety equipment is at hand. Check the roof overhang beyond fascia is less than 50mm.



3 Low Points

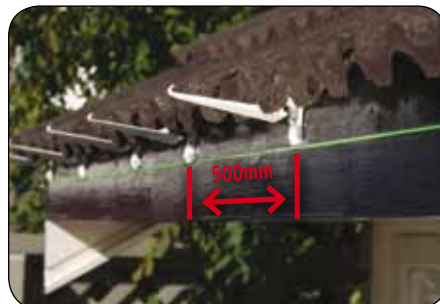
Establish low points of installation. These are identified by existing downpipes or stormwater outlets.

Fig 1



4 String line/Chalk line

Secure string line to fascia, using a screw from the first bracket to the low point. Use Fig 1 as reference. Ensure a fall of 5mm for every 10m of run.



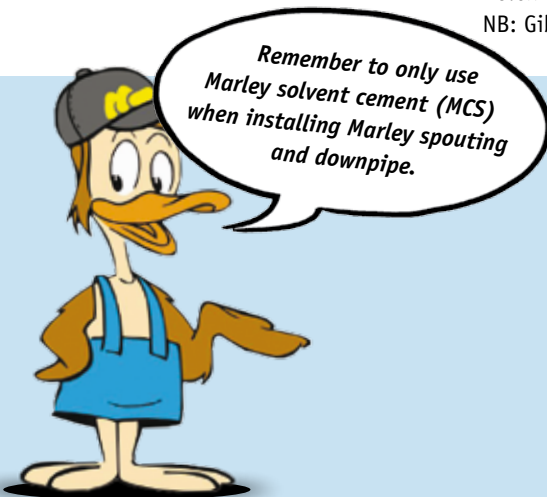
5 Brackets

Mark and secure brackets no more than 500mm apart. In high wind or snow prone areas reduce spacing to 300mm. Use a minimum of 3 nails or 3 stainless steel screws per bracket. Minimum screw is No.6x25mm coarse thread countersunk. NB: Gib clouts must NOT be used.



6 Outlet back plate (low point)

Use the back plate to ensure outlet is straight against string line. In a run exceeding 10m an expansion outlet or expansion joiner must be used and remember **do not solvent cement spouting into expansion outlet.**



HOW TO SOLVENT CEMENT YOUR FITTINGS



1 Surface areas to be joined must be clean, dry and free from burrs.



2 Marley solvent cement (MCS) should be applied evenly to both surfaces being joined.



7 Outlets

Secure outlet to back plate. **Place brackets within 50mm either side of outlet.**



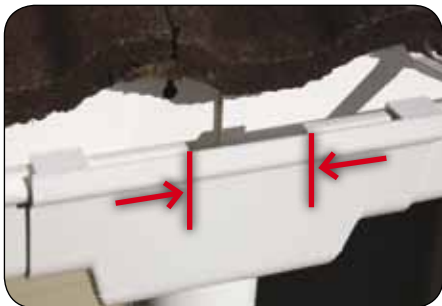
8 Corners

When required, solvent cement corners onto correct end of the spouting using Marley solvent cement (MCS).



9 Installation

For internal brackets, position front of spouting into front of bracket, then roll spouting into back of bracket until secure. For external brackets, position back of spouting into back of bracket, then roll spouting into front of bracket until secure. See www.marley.co.nz for specifics on each spouting profile.



10 Expansion Outlet

Bring the two lengths of spouting together to marked point on expansion outlet. For key to temperature graduation on expansion outlets see comprehensive installation instructions at www.marley.co.nz.



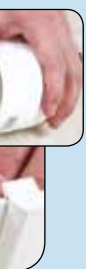
11 Corners

Solvent cement any remaining corners and use an expansion joiner to connect any remaining lengths.



12 Check

Check project is safe and complete. Clean any excess Marley solvent cement (MCS) from corners or joiners to minimise potential pooling of water. Ensure spouting is correctly secured to each bracket and space has been provided for expansion and contraction.



Note: Grey MCS is available for Magnum spouting

3 Any surplus solvent cement should be removed immediately with a damp, clean, lint free cloth. Leave sitting for 10 minutes.



HOW DO I INSTALL MY DOWNPIPE?

Marley downpipes are designed to be impact resistant, which means they are ideal for use around the home. Marley downpipes are also suitable for the collection of rainwater for drinking purposes. For more technical information on downpipe installation see www.marley.co.nz.

Remember downpipes discharging onto a lower roof must be fitted with a downpipe spreader.



- 1 Install expansion outlet as per spouting installation instructions.



- 2 Connect downpipe bend to expansion outlet using a screw to hold bend in place. Do not solvent cement bend to outlet.



- 3 Determine the offset length (A) using Figure 2 allowing for depth of socket and taking into consideration the downpipe bracket distance from the wall (B). Cut downpipe as per measurements.



- 4 Solvent cement all remaining elbows to downpipe on ground, before completing offset installation.



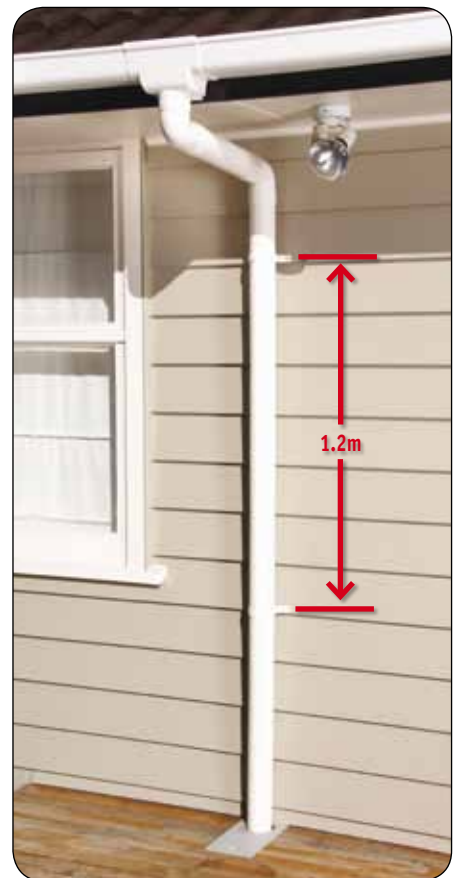
- 5 Use a level or plumb line to mark where the downpipe will sit against the wall. Ensure brackets are spaced no more than 1.2m apart.



- 6 Connect downpipe to access pit, surface drainage or stormwater outlet.



- 7 Ensure brackets are secured with at least two stainless steel screws, so the downpipe can be removed for cleaning if necessary. Note - Marley spouting and downpipes are not designed for a concealed system or for use in wall cavities.



- 8 Check project is complete and joints are clean.

HOW DO I REPAIR MY SPOUTING?

Marley systems are designed for easy replacement of individual components. Below are easy instructions for repair and maintenance of your spouting.



REPAIR DAMAGED SPOUTING



1 Mark and cut 50mm inside bracket either side of damaged area.



2 Replace any damaged brackets. Place joiner and expansion joiner then measure distance in between for replacement piece.



3 Cut replacement section on ground and solvent cement a joiner and expansion joiner to each end.



4 Solvent cement replacement section into damaged area. Remove any excess Marley solvent cement (MCS).



5 Check remainder of house for other possible damages.

Remember to clean your spouting annually using warm soapy water and a car cleaning brush. This helps your spouting last longer.



FIXING SPOUTING CREEP



1 Spouting creep is when expansion and contraction does not occur in a conventional manner and may result in spouting pulling out of the expansion outlet or pushing into outlet and causing blockages.



2 Re-attach spouting to expansion outlet. Use spouting installation instructions as a reference.



3 Secure spouting to fascia using a screw at the point furthest from the expansion outlet in the same run.

HOW DO I PAINT MY SPOUTING?

You can also personalise your look by painting any of the Marley spouting and downpipe products and accessories. Remember to allow for greater expansion/contraction with dark colours and refer to your paint specialist for colour options.



After installation spouting and downpipe can be painted any colour (dark colours require additional expansion/contraction allowance). Clean spouting before painting, using methylated spirits.

For best results use a mineral based undercoat and two coats of 100% weatherable acrylic paint.

It is recommended that the ends of spouting in the expansion outlet be painted so when spouting contracts a white line is not visible. Painting must be carried out after installation (except in expansion outlets and expansion joiners) and do not paint the inside of spouting or the internal brackets.



Wash your spouting before you begin painting.

WHERE CAN I BUY MARLEY PRODUCTS?

To find your nearest Marley stockist visit www.marley.co.nz.



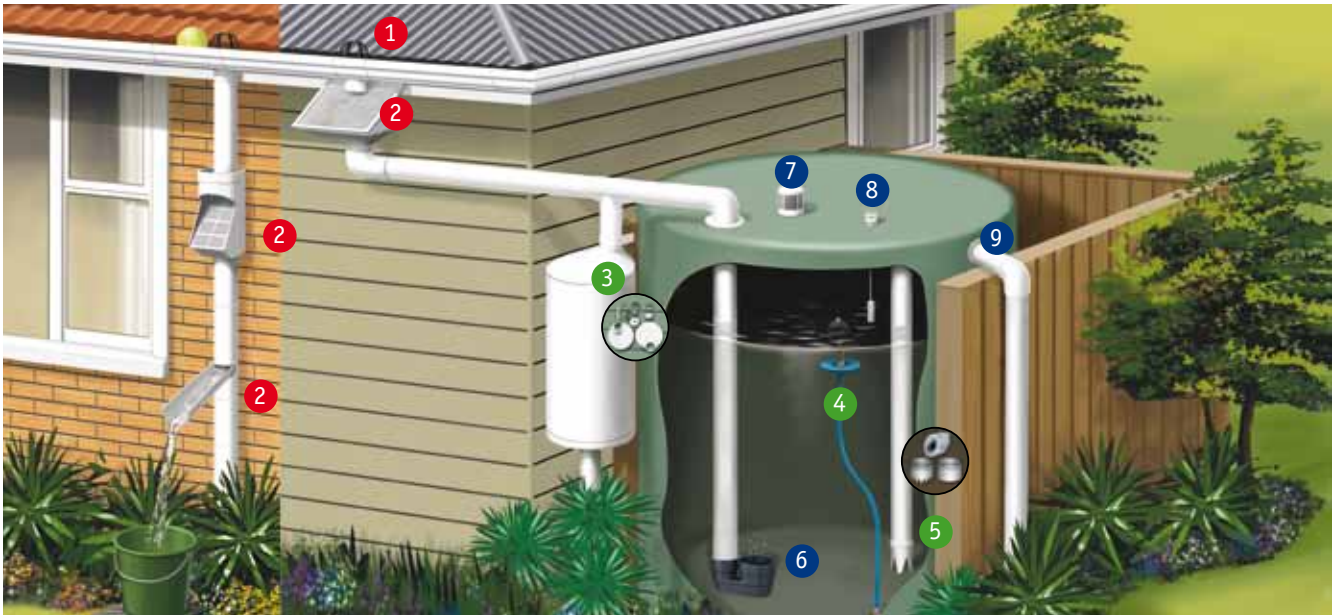
Get exactly what you want with Marley's customised ordering service, Flexipak. Ask in store to find out more.






















HOW DO I IMPROVE MY RAINWATER COLLECTION

HOW SAFE IS THE WATER YOU ARE COLLECTING?

The Marley Rain Harvesting systems comprises of a number of unique and cost effective components that are designed to work with the Marley uPVC range of spouting and downpipes to help make tank water as clean as possible. However, it is advisable to have your tank water analysed regularly to check its potability. When collecting potable water Marley recommend you seek advice from a registered tradesperson.



Debris Diversion Products		Filtration Products		Tank Improvement Products	
OUTLET STRAINER  PRODUCT CODE: RWST	1	90mm FIRST FLUSH DIVERTER  PRODUCT CODE: RH8119-5 90mm. 700-90-6 (90 DN Stormwater Pipe 6SJ)	3	CALMED INLET  PRODUCT CODE: RHCI Universal inlet up to 100mm.	6
LEAF EATER RAIN HEAD  PRODUCT CODE: RH8119 80/90mm.	2	300mm FIRST FLUSH DIVERTER  PRODUCT CODE: RH8121-1 90mm fittings. 300mm first flush.	3	VENT COWL  PRODUCT CODE: RH8119-9 50mm.	7
LEAF BEATER RAIN HEAD  PRODUCT CODE: RH8120 80/90mm dual fit.	2	FLOATING OUTTAKE  PRODUCT CODE: RHFO 35mm OD 25mm ID	4	STAINLESS STEEL INSECT PROOF SCREEN  PRODUCT CODE: RH8116 90mm.	7
LEAFSLIDE  PRODUCT CODE: RWLS Universal inlet. 80mm outlet.	2	FLOATING OUTTAKE COLLAR  PRODUCT CODE: RHFO.C	4	INSECT PROOF FLAP VALVE  PRODUCT CODE: RH8119-3 90mm.	7
LEAF CATCHER RAIN HEAD  PRODUCT CODE: RH8117 90/100mm dual fit.	2	90mm TANK VACUUM KIT  PRODUCT CODE: RHFVT90 (Poly/F-Gloss/Flat Wall) PRODUCT CODE: RHCONT90 (Concrete Tanks) 90mm.	5	MECHANICAL LEVEL GAUGE  PRODUCT CODE: RHMG 40mm	8
DOWNPIPE DIVERTER  PRODUCT CODE: RWDD 80mm.	2			RAIN ALERT  PRODUCT CODE: RHRA	8
				FLANGED TANK OVERFLOW OUTLET  PRODUCT CODE: RH8124-1 90mm x 90°	9
				PLAIN TANK OVERFLOW  PRODUCT CODE: RH8124-2 90mm x 90°	9

First flush diverter calculation method:
 90/100mm Dual Fit First Flush Diverter KIT only.
 $m^2 \text{ Roof Area} \times \text{Pollution Factor} + (\text{Length of wet pipe(m)} \times \text{pipe cross-section factor}) = \text{litres to be diverted.}$
 Pollution Factor 0.5 Minimal Pollution; open field.
 Pollution Factor 2 Substantial Pollution; leaves, debris, bird droppings, various insect matter.

For more information on Marley Rain Harvesting products visit www.marley.co.nz

Other helpful resources for Marley Spouting and Downpipe Solutions.



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AUCKLAND - Mahia Road, Manurewa, Private Bag 802, Manurewa.
 Sales Department Tel: 09 279 2777
 Direct Fax: 09 279 2778
 Freefax: 0800 652 621
 Head Office Tel: 09 279 2799
 Fax: 09 279 2798
 CONTACT CENTRE: 0800 222 922

CHRISTCHURCH
 Shands Road, Hornby, PO Box 16233 Christchurch.
 CONTACT CENTRE: 0800 222 922



WORKING WITH MARLEY FOR A BETTER TOMORROW

For more information: 0800 MARLEY (0800 627 539)

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Rainwater Solutions

