MARLEY
Plumbing & Drainage Solutions

Rainwater Systems

marley.co.uk

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The Marley Plumbing & Drainage rainwater range consists of five gutter profiles and three downpipe options. Advanced Life4 technology on four of the key profiles, coupled with the benefits of the easyclip and notching capability combine to make the Marley rainwater range the most comprehensive available.

Production information
Information on the complete range of Marley Plumbing & Drainage system solutions is available to download from marley.co.uk or available via the literature hotline 01622 852585.

BS EN ISO 9001:2008
BS EN ISO 14001:2004

Contents

The systems

Applications

The choice of size and profile means that the range includes a system for almost any building or application.

Rainwater system	 Porches, greenhouses & sheds	 Conservatories	 Small to medium houses	 Medium to large houses	 Flats, small to medium commercial projects
Deepflow		●	●	●	●
Clip-master	●	●	●	●	
Flowline	●	●	●	●	
Deepflow150				●	●
Classic		●	●	●	●

● Ideal application ● Suitable

Deepflow 110 x 75mm semi-elliptical system

Still the market leader, the Deepflow semi-elliptical profile produces self cleansing flow resulting in a very high capacity. Deepflow can be installed using a notched or notchless joint (see page 14-15 for details).

Downpipe:
○ 68mm □ 65mm

Colours available:

Clip-master 112 x 49mm nominal half round system

Clip-master is a practical, easy to install PVCu nominal half round gutter system which is compatible with most other manufacturers' half round systems. Clip-master can be installed using a notched or notchless joint. (see page 14-15 for full details).

Downpipe:
○ 68mm □ 65mm

Colours available:

Flowline 112 x 60mm rectilinear system

Flowline is an attractive rectilinear profile PVCu gutter system, capable of carrying capacities in excess of standard half round gutters. Flowline is the aesthetic choice for larger roof areas. Flowline can be installed using a notched or notchless joint (see page 14-15 for full details).

Downpipe:
○ 68mm □ 65mm

Colours available:

Deepflow150 155 x 98mm high capacity semi-elliptical system

Deepflow150 is a larger version of the Deepflow profile and is ideal for small to medium commercial projects, flats and industrial applications. Capable of carrying up to 6.0 litres a second. Deepflow150 can be installed using a notched or notchless joint (see page 14-15 for full details).

Downpipe:
○ 82mm

Colours available:

Classic 116 x 75mm ogee style system

Classic is a bold, highly decorative, Ogee style PVCu gutter system, featuring both internal and external fascia brackets. All Classic fittings are supplied complete with clips and seals. Outlets and unions incorporate screw fixing points to anchor fittings for the control of thermal movement.

Downpipe:
○ 68mm □ 65mm

Colours available:

To order further commercial systems, please contact your Project Sales Manager.

Rainwater systems that stay looking better for longer

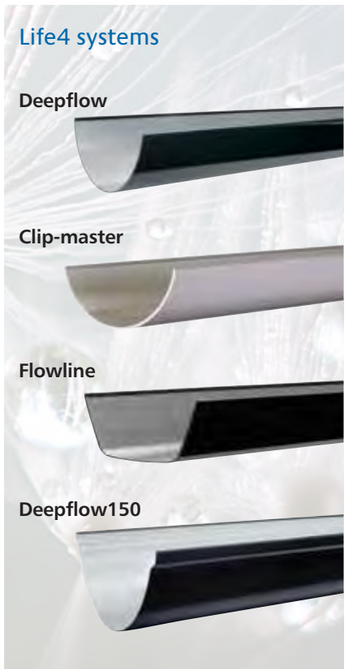
We're all affected by the steady advance of time. Years of exposure affects how everything looks. Marley Plumbing & Drainage have advanced the manufacturing process to create Life4. Life4 rainwater systems can withstand exposure for up to four times longer than standard PVCu rainwater gutters and downpipes.

Looks better...

Life4 gutters and downpipes have high gloss levels that are consistent with the fittings, improving the overall aesthetic of the system. The gloss level is typically 85% compared to a norm of 40 - 50% on standard systems.

...for longer

Not only do Life4 products look better, they last longer. Life4 products have been exposed to up to four times the European weathering test duration and performed admirably (see right).



Life4 – the performance standard

The benchmark for weathering tests for rainwater systems is set out within European standards*. The weathering test essentially mimics actual conditions, but also accelerates them in order that long term performance may be assessed. This artificial ageing type test consists of 1600 hours of exposure to high intensity UV lighting with specified levels of irradiation and condensation, which is designed to emulate approximately 3 years of natural weathering.

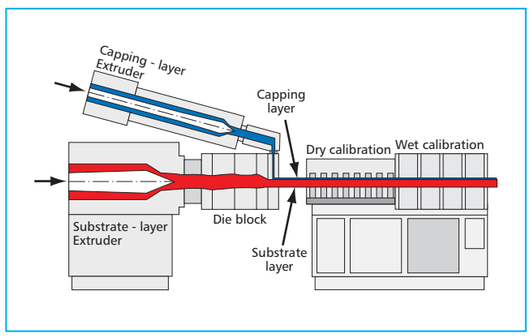
Standard Marley rainwater systems achieve excellent results when measured to this requirement.

In order to demonstrate the enhanced performance of Life4, gutters and downpipes were exposed to the artificial ageing test for up to four times this duration (6400 hours). Measurements taken after this extended test showed that the extent of colour fade was still well below that permitted in the European Standard after 1600 hours.

Life4 – the science of production

Life4 uses a higher specification material to form a capping layer on the outside of the gutter or pipe. This material is by its very nature more durable and has a high gloss finish.

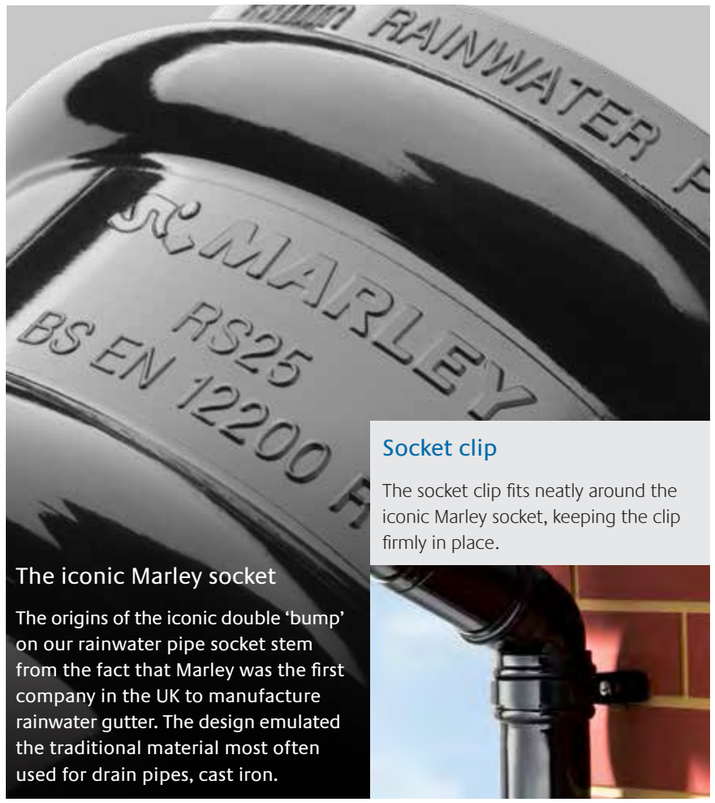
The remaining material used in the product is standard PVCu containing 15% post production recycled material. All materials are lead free.



*BS EN 607:2004 Eaves gutters and fittings – PVCu and EN 12200-1: 2000 Plastics rainwater piping systems for above ground external use – PVCu. (These standards replace the previous British Standard, BS4576.)

Key components

Marley rainwater systems offer complete roof drainage solutions for a variety of building sizes and styles. Pictured is a selection of key components within the range. For rainwater product specifications, see pages 20 – 35.



The iconic Marley socket

The origins of the iconic double 'bump' on our rainwater pipe socket stem from the fact that Marley was the first company in the UK to manufacture rainwater gutter. The design emulated the traditional material most often used for drain pipes, cast iron.

Socket clip

The socket clip fits neatly around the iconic Marley socket, keeping the clip firmly in place.

Easyclip

Deepflow, Clip-master, Flowline and Deepflow150 rainwater systems benefit from the Marley easyclip, which makes jointing both easy and reliable. The easyclip has twin compression tabs, which apply downward pressure onto the gutter seal, to ensure a watertight joint. A positive 'click' is made when the gutter is in place. The easyclip also makes life easy if you need to dismantle the joint.

Easyclip

Notch adaptor (RGNA1)

It is possible to adapt the easyclip to make fittings suitable for 'notch' jointing, by fitting a 'notch adaptor' into the centre of the easyclip. The adaptor will then fit into a notch cut into the back of the gutter.

This is an effective way of allowing gutter to expand and contract due to temperature change without gutter and fitting pulling apart. There is also no need to anchor fittings to the fascia, an ideal solution when using rafter arm brackets (see page 13).

Notch adaptor (RGNA1)

Pipe clips

Two different pipe clip fixing methods are available. A one piece clip for flush fixing or a two piece clip to fit both the downpipe and pipe socket. These are used with backplate RCB300 and allow for adjustment.

One piece pipe clip

Two piece pipe clip

Hopper head (RH252)

Designed with a curved front in order to collect high velocity rainwater and with a flow rate of 5.14 l/s, this hopper head can easily deal with the concentrated discharge that is likely during peak rainfall conditions.

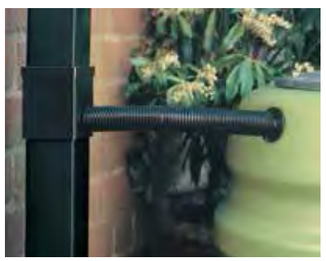
For hopper head flow rates, see page 12.

With square downpipe

With circular downpipe

Rain diverter (RD25R)

The need to reuse rainwater has become a way of life. The Marley rain diverter provides a simple solution for connecting downpipe to a water butt to capture this precious resource. Suitable for use with 68mm circular or 65mm square PVCu downpipes and available in black, brown, grey and white.



Rain diverter (RD25R)

Side fixing points

Side fixing points on outlets allow fast fixing, whether power or hand tools are used.

Fascia bracket roller bars

The fascia brackets on all rainwater systems feature roller bars to aid thermal movement.

Running outlet with side fixing points

Fascia bracket

Gutter adaptors

Gutter adaptors to enable connection from Clip-master to Flowline, half round to cast iron or Clip-master to Ogee cast aluminium are all available as standard items.

Clip-master to Flowline adaptor (RGA2R)

Half round to cast iron adaptor (RGA1R). Also suitable for adapting 100mm to 112mm half round

Clip-master to Ogee cast aluminium adaptor (RGA4 [shown] & RGA5)

Drain adaptors

Drain adaptors allow connection from 65mm square to 68mm circular plain and socketed pipe.

Flexible rubber adaptor (RA42)

65mm square socket to 68mm socketed pipe adaptor (RLE2)

65mm square socket to 68mm plain ended pipe adaptor (RLE4)

Roof drainage design

Design basis

To assess the suitability of a gutter system to drain the roof of a building the following factors need to be taken into consideration:

1. The effective roof area to be drained.
2. Rainfall intensity.
3. The flow characteristics of the gutter system.
4. The number and position of downpipes.

1. Effective roof area

The effective roof area can be determined by calculation in accordance with the following:

- BS EN 12056-3:2000, Roof drainage layout and calculations.
- The Building Regulations 2002 Approved Document H, Part H3.

The formula and example shown below reflects the method used in the above standard to calculate effective roof area.

Multiplication factors

An alternative approach to that described above is the use of multiplication factors to establish effective roof area. From plan area the appropriate factor for the roof slope can be applied to determine the effective area.

This method is similar to that shown in Approved Document H of the Building Regulations. The table below provides a wider range of factors to enable accurate assessment of effective roof area to be determined.

Roof pitch	Factor	Roof pitch	Factor
10°	1.088	30°	1.288
12.5°	1.111	32.5°	1.319
15°	1.134	35°	1.350
17.5°	1.158	37.5°	1.384
20°	1.182	40°	1.419
22.5°	1.207	42.5°	1.459
25°	1.233	45°	1.500
27°	1.260	47.5°	1.547

Vertical surfaces

Where pitched roofs abut vertical walls the catchment area is likely to be increased as a result of wind driven rain. To allow for this half the vertical surface area of the wall should be added to the effective area of the sloping roof.

Flat roofs

For roofs with a pitch of less than 10°, the effective area is taken as the plan area.

2. Rainfall intensity

The Building Regulations 2002 Approved Document H and BS EN 12056-3: 2000 provide detailed information on rainfall throughout the UK by geographical location and frequency of occurrence. The flow rates shown below for Marley PVCu gutter systems have been determined from tests carried out in accordance with the test procedure in BS EN 12056-3: 2000.

Gutter selection

Although aesthetic appearance is an important aspect in the selection of a particular gutter system, the following factors also need to be taken into consideration as they could influence the final choice of system.

- The size of gutter and its flow capacity.
- Whether the gutter is fitted level or to a fall.
- If end or centre outlet position for downpipes are adopted.
- The length of gutter to an outlet/ downpipe.

3. Flow capacity

The maximum flow capacity of different Marley gutter systems can be compared from the tables shown below. The capacity of each system varies depending on profile, size and whether the gutter is fitted level or to a fall. For design purposes eaves gutters are normally sized to ensure the calculated run-off does not exceed 90% of the gutter capacity. It is also recommended that gutters are fixed level as this enables the gutter to be fitted as high as possible to ensure the correct relationship is maintained at the roof edge.

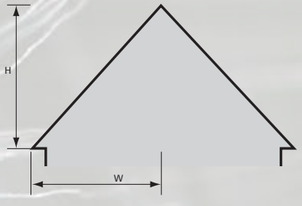
Effect of valleys

Where valleys occur it is good practice to position an outlet adjacent to the internal angle to deal with the concentrated discharge that is likely at such points during peak flow conditions. Depending on the size of roof it may also be beneficial to fit a corner hopper where the flow is considerable.

4. Rainwater pipe sizes

With the exception of the Deepflow150 gutter system which has an 82mm diameter downpipe, all other Marley PVCu gutter systems incorporate outlets suitable for 68mm circular or 65mm square rainwater pipes. This size of downpipe has been selected as it has the necessary capacity to accommodate the maximum flow from any of the gutter systems.

Effective roof area

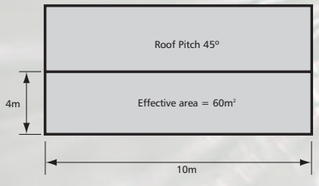


$\left(\frac{H}{2}\right)$ + W x L = m²

For example a roof 4m high x 4m wide x 10m long

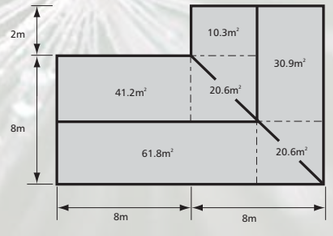
2 + 4 x 10 = 60m²

Multiplication factor method

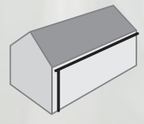


Using the same roof dimensions as the example above with a 45° roof pitch.

4m wide x 10m long x 1.5 = 60m²

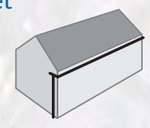


Outlet at one end



	level		fall 1:600	
Gutter system	m²	l/s	m²	l/s
Clip-master	43	0.90	48	1.00
Flowline	70	1.46	84	1.75
Deepflow	90	1.90	110	2.31
Classic	103	2.16	–	–
Deepflow150	133	2.80	–	–

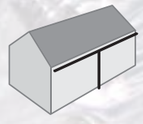
Outlet at one end with an angle within 2m of outlet



	level		fall 1:600	
Gutter system	m²	l/s	m²	l/s
Clip-master	39	0.81	43	0.95
Flowline	63	1.31	76	1.58
Deepflow	81	1.70	99	2.07
Classic	93	1.94	–	–

For gutters with angles further than 2m from the outlet increase the above figures by 5%

Outlet in centre



	level		fall 1:600	
Gutter system	m²	l/s	m²	l/s
Clip-master	84	1.75	92	1.92
Flowline	135	2.84	170	3.40
Deepflow	185	3.90	226	4.75
Classic	216	4.55	–	–
Deepflow150	286	6.00	–	–

Installation data

Gutter position

The spread of water as it leaves the roof edge can vary considerably depending on the rainfall intensity, type of roof surface and the pitch of the roof. BS EN 12056-3: 2000 recommends that eaves gutters should be fitted in such a position that they intercept the flow at the roof edge and that gutters are fitted centrally under the roof tile and close beneath it.

Gutters can be installed level or with a nominated gradient of 1:600. If fitted to fall, care should be taken to ensure the top of the gutter does not fall below the roof tile to such an extent that the water will pass over the front edge of the gutter. It is also important that the eaves course of the tile or slate should not project too far over the fascia board and a maximum of 50mm is recommended for 112-125mm nominal size gutters.

Fascia brackets

All Marley PVCu gutter fascia brackets have been tested to the loading tests as detailed in BS EN 1462 and perform in excess of the highest classification, Class H heavy duty, which requires brackets to support a dead weight load of 75kg, to simulate snow load.

It is recommended that brackets are fixed with the aid of a string line to maintain alignment and bracket centres must not exceed 1m maximum centres. When fixing to cellular fascia boards the two outer most fixing holes must be used and 1" x 10g (32x5mm) pan or round head non-ferrous screws must be used. The use of countersunk screws is not recommended.

When fixing to cellular fascia boards of less than 16mm thick, a timber support batten should be fitted behind to ensure a secure fixing is obtained. To improve the loading characteristics of the gutter system, fascia bracket centres can be reduced but in areas of the country that experience frequent heavy snow fall, the use of snow boards is recommended as advised in BS EN 12056-3: 2000.

The use of the gutter bracket centre fixing hole is not recommended and is provided to facilitate the adjustable rafter arm brackets RSA1A and RTA1A.

Fascia bracket

Hopper Heads

The flow capacities of different size hopper heads are shown in the table below and are based on a rainfall intensity of 0.021 l/s per square metre of roof area.

Product Code	Pipe Size	Roof Area m^2	Flow rate litres/ second
RH252	68mm	247m^2	5.14l/s
RH25	68mm	360m^2	7.56l/s
SH30	82mm	196m^2	4.11l/s
SH40G	110mm	720m^2	15.12l/s
SH40B	110mm	720m^2	15.12l/s
SH60	160mm	935m^2	19.63l/s

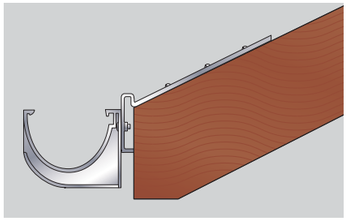
Roof and balcony outlets

Marley provide a range of roof outlets, sized to suit various applications. 68mm PVCu outlets are shown on page 35. Aluminium outlets, sized 50-150mm are shown in the Alutec Roof and Shower Drainage Guide.

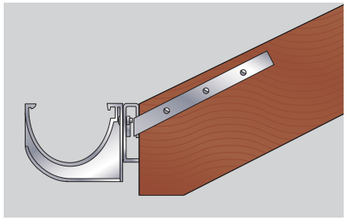
Rafter arm brackets

Rafter arm brackets can be used with all Marley gutter systems. Additional structural fixings should be provided when used with a clip-jointed gutter system, to enable key fittings to be anchored and supported for the control of thermal movement.

It is recommended that notched gutters are used on buildings without fascia boards as key fittings such as unions and outlets do not need to be secured and can be positioned adjacent to structural fixing points. Top rafter brackets, RTA1 or RTA1A, will need to be fitted before the roof is tiled. Side rafter brackets, RSA1 or RSTA1A, may be fitted afterwards and are easily adjusted to accommodate minor variations in line and level. Nuts and bolts are supplied to secure fascia brackets to the rafter arm. Although fixings are controlled by rafter centres it is important to meet gutter support recommendations previously described.



RSA1A adjustable side rafter arm, RSA1 also available



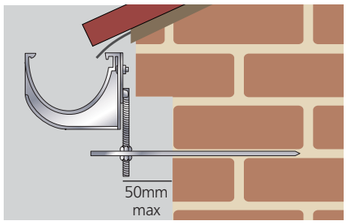
RTA1A adjustable top rafter arm, RTA1 also available

Rise and fall brackets

Rise and fall brackets, RKF1, can be used with clip-jointed gutters although a notched system is recommended as described for rafter arm fixing above. Nuts and bolts are supplied to secure fascia brackets to the multi-fit face plate. It is recommended that pilot holes are drilled in mortar joints before the spike is driven in to avoid cracking the brickwork bond. Bracket centres should not exceed 600mm.

Angle fascia bracket

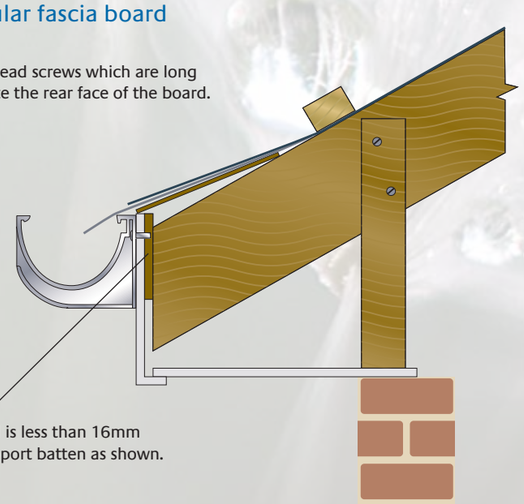
Angle fascia bracket adaptors, RKA1, RKA2, are required when a sloping fascia board is employed at the eaves. The galvanised mild steel adaptor is fitted behind the fascia bracket with two 1¾" x 10g (45x5mm) non-ferrous round head screws passing through both bracket and adaptor.



RKF1 rise and fall bracket

Fixing to cellular fascia board

Use two parallel thread screws which are long enough to penetrate the rear face of the board.



If the cellular board is less than 16mm thick, fit timber support batten as shown.

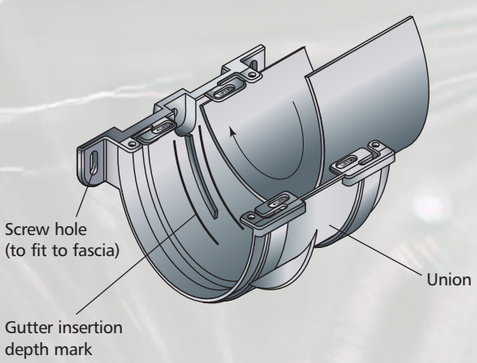
Gutter jointing

Clip-jointed gutter systems

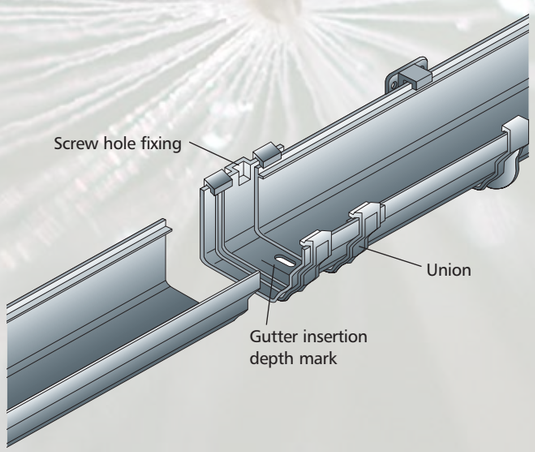
Each joint is made by inserting the plain edge of gutter into the fitting and locating under the rear clip. At the same time ease the front edge of fitting forward and up until the gutter clips under the front edge. Care must be taken to ensure that each length of gutter is fitted to the insertion mark on each fitting. This is particularly important and attention to this will ensure trouble free performance for many years.

Unions and outlets incorporate fixing holes in the rear edge which must be used to secure the fitting to the fascia board. This is essential for the control of thermal movement that occurs with temperature variations. The length of gutter to a stopend from a fitting must not exceed 300mm. Where this is exceeded a union must be fitted and secured as previously described with a short piece of gutter to the stopend. With Deepflow, Deepflow150, Clip-master and Flowline the length of gutter to a stopend can be retained using the notch technique and adaptor RGNA1 to eliminate this particular restriction (see opposite).

Deepflow, **Deepflow150**, **Clip-master** and **Flowline** systems are jointed via the innovative easyclip which makes it simple to joint the gutter and fitting, but it is also very easy to take apart if necessary.



The **Classic** system is jointed by means of pre-fitted clips on all fittings.



Notched gutter systems

It is possible to adapt the easyclip to make fittings suitable for 'notch' jointing, by fitting a 'notch adaptor' into the centre of the easyclip. The adaptor will then fit into a notch cut into the back of the gutter.

This is an effective way of allowing gutter to expand and contract due to temperature change without gutter and fitting pulling apart. There is also no need to anchor fittings to the fascia. This method is ideal to anchor the last joint of a gutter run which ends with a stopend.

To watch a video demonstration of notch jointing, go to www.marleyplumbinganddrainage.com/videos/4rainwater.html

Deepflow, **Deepflow150**, **Clip-master** and **Flowline** can be installed as notched systems.

Using a notching tool, RGN1, notch the rear of the gutter. Notches must be made to both ends of a length of gutter.

A notch adaptor RGNA1 is then inserted into the easyclip from the underside, between the gap in the body of the fitting and the clip arm. Insert one end of the short side of the adaptor into the open end of the easyclip. Twist the other side of the adaptor into place. The adaptor is necessarily a tight fit to ensure it stays in place.

The notched gutter end is located under the notch adaptor and the joint completed by clipping the gutter under the easyclip on the front of the fitting.

When correctly assembled, a notched joint cannot pull apart and will absorb expansion and contraction associated with variations in temperature, while maintaining a watertight seal.

Downpipes

General

As rainwater pipes are generally fitted externally, joints between each spigot and socket length do not need to be sealed. However offset fittings are sized to allow for push fit or solvent weld jointing.

Gutter outlets are normally positioned directly above drain connections but on occasions it may be necessary to rotate the offset to avoid obstructions below. However when using the square downpipe system, the gutter outlet should be positioned directly above the rainwater drain connection, as square offsets cannot be rotated.

Where a RH25 hopper head is used, the RLE3 outlet adaptor with a pipe socket are required to provide the necessary transition from circular to square.

1. Offset assembly

Offsets can be easily constructed on site from a range of bends depending on the roof overhang at the eaves.

Where offsets exceed 600mm it is recommended that bends are solvent welded to gutter outlet spigots to ensure a positive connection. When two 87½° bends are used to construct an offset the horizontal section of pipe should be supported with a pipe clip from the soffit.

2. Location of pipe clips

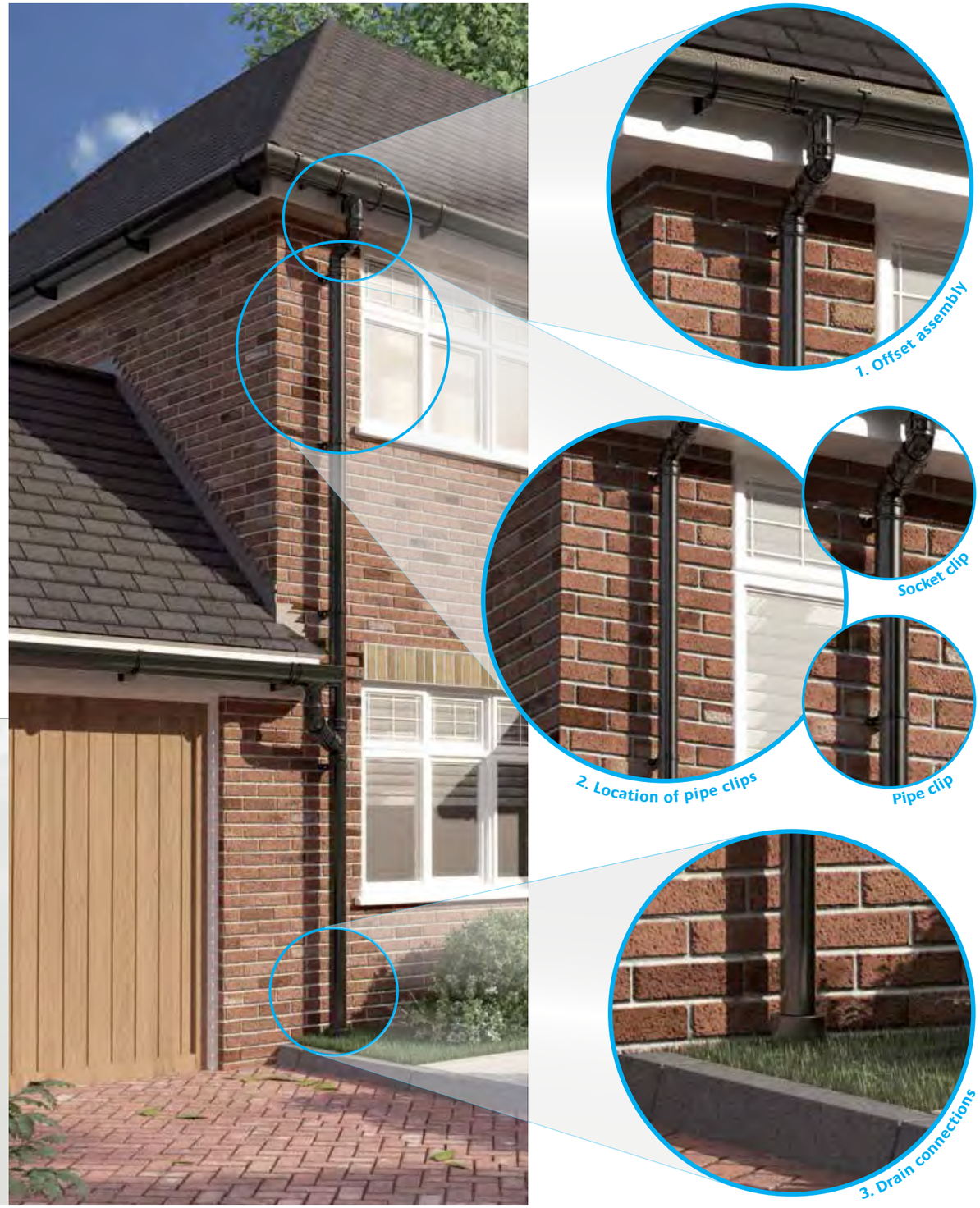
Every rainwater pipe should have a clip located round the top socket to support the downpipe system. Intermediate clips should then be located at a maximum of 1.8m centres or in the middle of each length to maintain alignment. A gap of 10mm should be left between the end of each pipe and the bottom of the socket to allow for thermal movement.

Two different pipe clip fixing methods are available. A one piece clip for flush fixing or a two piece clip to fit both the downpipe and pipe socket. These are used with backplate RCB300 and allow for adjustment.

Each should be secured with two 32 x 6.5mm non-ferrous round head screws. An extension backplate RT200 can also be used for greater adjustment of the downpipe from the wall.

3. Drain connections

External rainwater pipes usually connect direct to the surface water drain. Where a direct connection is made a reducer and a short section of pipe is used to provide the transition between different pipe sizes. A gully trap will be required to both arrangements where the drain connects to a combined foul and surface water drainage system.



Circular downpipe systems

Marley **Deepflow**, **Classic**, **Flowline** and **Clip-master** gutters all have outlets designed to suit 68mm circular downpipe, which has sufficient capacity to accommodate the maximum flow from the above gutter systems.

Square downpipe systems

Marley **Flowline** and **Classic** gutter systems are available with outlets suitable for 65mm square and 68mm circular rainwater pipes. For aesthetic reasons, the 65mm square system is normally preferred but both have sufficient capacity to accommodate the maximum flow from either system.

Standards

British & European Standards

BS EN 12056-3: 2000
Gravity drainage inside buildings: Roof drainage, layout and calculation.

BS EN 607: 2004
Eaves gutters & fittings - PVCu. Definitions, requirements and testing.

BS EN 12200-1: 2000
Plastics rainwater piping systems for above ground external use - PVCu.

BS EN 1329-1: 2000
Plastics piping systems for soil and waste discharge systems - PVCu.

BS EN 1462: 2004
Gutter brackets. Classification, requirements & testing.

BS EN 681-1: 1996
Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications. Part 1 vulcanised rubber.

BS 4255-1: 1986
Specification for non-cellular gaskets for buildings.

BS EN ISO 9001: 2008
Quality management system. Model for Quality Assurance in Design, Development, Production, Installation and Servicing.

BS EN ISO 14001: 2004
Environmental management systems. Requirements with guidance for use.

Accreditations

BS EN 607: 2004
BS EN 12200
BS EN 1329-1: 2000

BS EN ISO 9001:2008
BS EN ISO 14001:2004

Marley system solutions

Marley PVCu Soil
Standard PVCu soil systems to BS EN 1329: 2000. Ideal for domestic and commercial applications, including branch connections to other materials. Available in 82mm, 110mm and 160mm, ring seal and solvent weld jointing variants.

Marley HDPE
Marley Akatherm HDPE is a drainage system which offers an alternative solution to cast iron. It is particularly suited for commercial applications or where a product with high impact or abrasion resistance is required, such as hospitals, hotels, schools, as well as residential buildings. HDPE will also cope with temperature variations of -40°C to 100°C making it ideal for external as well as internal installations.

Marley dBlue
An acoustic soil and waste range with a triple layered pipe providing quick, hygienic removal of sanitary waste water. The noise generated by the flow of water is dramatically reduced – making it perfect for multi-occupancy apartment blocks and high specification developments.

Marley waste systems
A wide range of PVC-C, ABS and polypropylene waste ranges from 32mm to 50mm and in a variety of colours. The range includes waste traps in a hygienic white finish and higher specification chrome finish. Available with solvent weld, compression and push fit jointing.

Marley sanitary
High quality, durable, water and energy efficient solutions for the modern wash room. The range includes sanitary frames, concealed cisterns, flush actuation plates, linear and point drainage. Ideal for all situations, from commercial applications, including special products for schools, to high specification domestic settings.

Marley underground systems
The Marley Plumbing & Drainage range of underground systems include the solid wall range, predominately for round the house drainage and Quantum structured wall range for sewer and highway drainage applications.

Marley sustainable drainage
The Waterloc250 cell is ideal for use in either an underground infiltration or attenuation system. 96% of the cell volume is available to store water, minimising the extent of excavation required for the installation. The range includes Flowloc, a vortex control device, which controls the rate at which water is discharged to a surface water drain or water course.

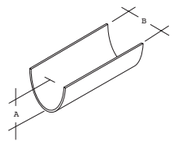
Marley Alutec
Alutec offer modern and traditional aluminium rainwater profiles, providing solutions for any type of building. Aluminium has high visual appeal and durability, lasting for 50 years or more. The product portfolio includes Evolve; easy to install, low cost gutter systems in four profiles. The rainwater ranges are complemented by aluminium soffit and fascia systems and roof & floor outlets.

Marley Equator
Equator is ideal for hot & cold water or central heating installations. A tamperproof fitting with a unique grip release mechanism ensuring that the system can only be disassembled through the use of a special de-mounting tool. Equator has been designed to meet the requirements of BS 7291: Parts 1 & 3; Class S. The complete Equator system is backed by a 30 year guarantee.

Product specifications

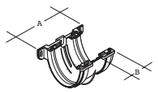
Deepflow 110 x 75mm semi-elliptical system

GUTTER



Size	Code	CSA mm²	A	B	Colour	Qty
3m	**RGD3**	6043	75	110	W B G BR	5
4m	**RGD4**	6043	75	110	W B G BR	5

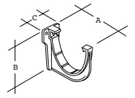
UNION BRACKET



Code	A	B	Colour	Qty
RUD10	155	40	W B G BR	20

Adaptors to join different gutter profiles are available to order

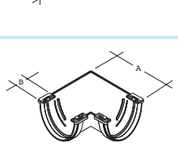
FASCIA BRACKET



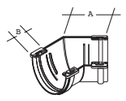
Code	A	B	C	Colour	Qty
RKD1	131	100	50	W B G BR	80

When used with 2 hole screw fixings, brackets meet the heavy class of BS EN 1462

ANGLES



Angle	Code	A	B	Colour	Qty
90°	**RAD10**	176	40	W B G BR	20

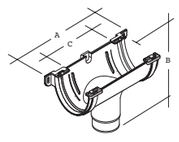


Angle	Code	A	B	Colour	Qty
45°	**RAD20**	108	80	W B G BR	15

Special gutter angles are available to order. Please state angle required.

Code	Colour
RFB21	W B G BR

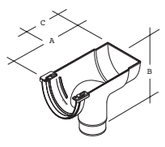
RUNNING OUTLET



Code	A	B	C	Colour	Qty
ROD10	275	164	153	W B G BR	12

68mm circular spigot

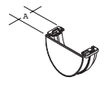
STOPEND OUTLET



Code	A	B	C	Colour	Qty
ROD20	227	164	107	W B G BR	15

68mm circular spigot

EXTERNAL STOPEND



Code	A	Colour	Qty
RED10	44	W B G BR	40

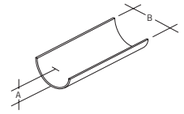
NOTCH ADAPTOR

Code	A	B	Colour	Qty
RGNA1	16	18	B	20

To adapt fitting for notch jointing

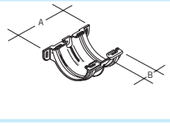
Clip-master 112mm nominal half round system

GUTTER



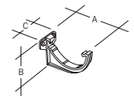
Size	Code	CSA mm²	A	B	Colour	Qty
3m	**RGC3**	3997	49	112	B G BR	5
4m	**RGC4**	3997	49	112	W B G BR	5

UNION BRACKET



Code	A	B	Colour	Qty
RUC1	155	40	W B G BR	15

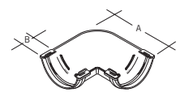
FASCIA BRACKET



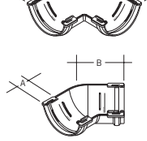
Code	A	B	C	Colour	Qty
RKC1	132	72	48	W B G BR	50

When used with 2 hole screw fixings, brackets meet the heavy class of BS EN 1462

ANGLES



Angle	Code	A	B	Colour	Qty
90°	**RAC1**	170	40	W B G BR	15

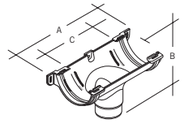


Angle	Code	A	B	Colour	Qty
45°	**RAC2**	110	80	W B G BR	10

Special gutter angles are available to order. Please state angle required.

Code	Colour
RFB104	W B G BR

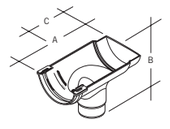
RUNNING OUTLET



Code	A	B	C	Colour	Qty
ROC1	275	138	155	W B G BR	15

68mm circular spigot

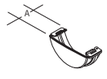
STOPEND OUTLET



Code	A	B	C	Colour	Qty
ROC2	228	138	105	W B G BR	15

68mm circular spigot

EXTERNAL STOPEND



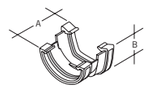
Code	A	Colour	Qty
REC1	40	W B G BR	20

SPARE CLIP

Code	A	Colour	Qty
RCC1	24	W B G BR	30

For use with old strapped system only

CLIP-MASTER TO FLOWLINE ADAPTOR



Code	A	B	Colour	Qty
RGA2R	87	72	W B G BR	

Other gutter adaptors are available to order

NOTCH ADAPTOR

Code	A	B	Colour	Qty
RGNA1	16	18	B	20

To adapt fitting for notch jointing

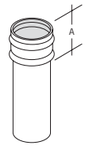
Deepflow and Clip-master are manufactured to BS EN 607

CAD drawing available to download from marley.co.uk

Product specifications

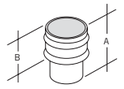
Circular downpipe 68mm system

PIPES



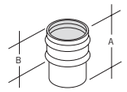
Size	Code	A	Colour	Qty
2.5m	**RPH2525**	52	B G BR	4
3m	**RPH253**	52	W B G BR	4
5.5m	**RPH2555**	52	W B G BR	4

SOCKETS



Loose pipe socket

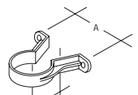
Code	A	B	Colour	Qty
RL25	100	50	W B G BR	10



Solvent weld pipe socket with push-fit seal

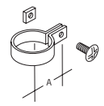
Code	A	B	Colour	Qty
RLR25	92	50	W B	10

CLIPS



One piece 8mm screw fixing holes

Code	A	B	Colour	Qty
RCZ253	94	72	W B G BR	30



Socket clip including nut and bolt for use with RCB300 backplate

Code	A	Colour	Qty
RC251	64	W B G BR	20

Pipe clip including nut and bolt for use with RCB300 backplate

Code	A	Colour	Qty
RC252	64	W B G BR	20

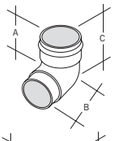
Backplate for use with RC251/RC252 clips

Code	A	B	Colour	Qty
RCB300	48	30	W B G BR SD	20

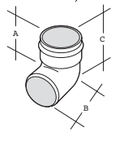
Nuts and bolts 20mm x 6mm

Code	Qty
RNB11	20

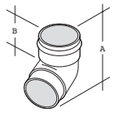
BENDS



Angle	Code	A	B	C	Colour	Qty
87½°	**RB251**	48	75	81	W B G BR	25



Angle	Code	A	B	C	Colour	Qty
67½°	**RB252**	38	60	66	W B G BR	25



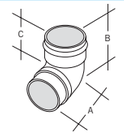
Angle	Code	A	B	C	Colour	Qty
45°	**RB253**	48	53	63	W B G BR	25

Socket/spigot

68mm circular downpipe is manufactured to BS EN 12200

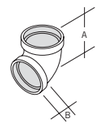
Circular downpipe 68mm system

OFFSET BENDS



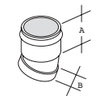
Angle	Code	A	B	C	Colour	Qty
67½°	**RNE255**	66	66	37	W B G BR	25

Socket/push-fit spigot



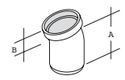
Angle	Code	A	B	Colour	Qty
67½°	**RNA250**	41	15	W B G BR	10

Socket/socket. For deep fascias



Angle	Code	A	B	Colour	Qty
20°	**RNE252**	51	15	W B G BR	10

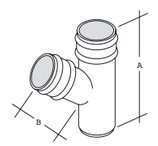
Socket/socket. For 25mm offset construction



Angle	Code	A	B	Colour	Qty
20°	**RNE253**	56	15	W B G BR	10

Socket/spigot. For 25mm offset construction

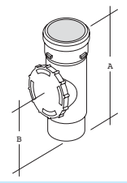
BRANCH



Angle	Code	A	B	Colour	Qty
67½°	**RY252**	196	90	W B G BR	10

Socket/spigot

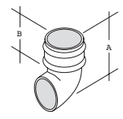
ACCESS PIPE



Code	A	B	Colour	Qty
RF25	185	96	W B G BR	15

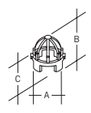
Socket/spigot

SHOE



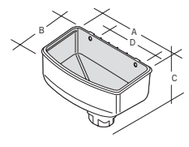
Code	A	B	Colour	Qty
RS25	137	48	W B G BR	15

LEAF GUARD



Code	A	B	C	Colour	Qty
RV225	64	55	18	W B G BR	30

HOPPER HEAD



Code	A	B	C	D	Colour	Qty
RH252	308	174	220	200	W B G BR	6

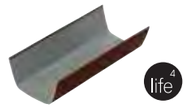
Suitable for use with 68mm circular and 65mm square downpipe, using appropriate socket

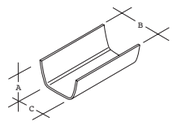
CAD drawing available to download from marley.co.uk

Product specifications

Flowline 112 x 60mm rectilinear system

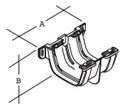
GUTTER





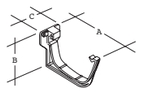
Size	Code	CSA mm²	A	B	C	Colour	Qty
4m	**RGF4**	5412	60	112	80	W B BR	5

UNION BRACKET



	Code	A	B	Colour	Qty
	RUF1	155	84	W B BR	12

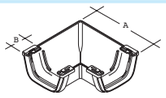
FASCIA BRACKET



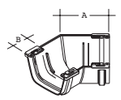
Size mm	Code	A	B	C	Colour	Qty
	RKF2	132	85	48	W B BR	40

When used with 2 hole screw fixings, brackets meet the heavy class of BS EN 1462

ANGLE



Angle	Code	A	B	Colour	Qty
90°	**RAF1**	188	40	W B BR	20

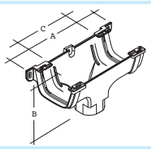


Angle	Code	A	B	Colour	Qty
45°	**RAF2**	110	40	W B BR	15

Special gutter angles are available to order. Please state angle required.

	Code	Colour	Qty
	RFB102	W B BR	

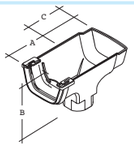
RUNNING OUTLET



	Code	A	B	C	Colour	Qty
	ROF1	275	134	155	W B BR	12

Suitable for both 68mm circular or 65mm square downpipe

STOPEND OUTLET



	Code	A	B	C	Colour	Qty
	ROF11	225	134	110	W B BR	15

Suitable for both 68mm circular or 65mm square downpipe

EXTERNAL STOPEND

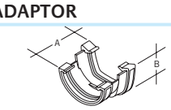
	Code	A	Colour	Qty
	REF2	53	W B BR	20

SPARE CLIP

	Code	A	Colour	Qty
	RCF1	24	W B GR	30

For use with old strapped system only

CLIP-MASTER TO FLOWLINE ADAPTOR



	Code	A	B	Colour	Qty
	RGA2R	87	72	W B BR	

Other gutter adaptors are available to order

NOTCH ADAPTOR

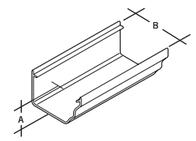
	Code	A	B	Colour	Qty
	RGNA1	16	18	B	20

To adapt fitting for notch jointing

Flowline and Classic are manufactured to BS EN 607

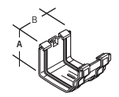
Classic 116 x 75mm ogee style system

GUTTER



Size	Code	CSA mm²	A	B	Colour	Qty
4m	**RCG54**	7377	75	116	W B BR	4
6m	**RCG56**	7377	75	116	W BR	4

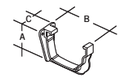
UNION BRACKET



	Code	A	B	Colour	Qty
	RCU51	88	100	W B BR	15

Adaptors to join different gutter profiles are available to order

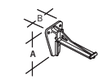
EXTERNAL FASCIA BRACKET



	Code	A	B	C	Colour	Qty
	RCK51	98	136	54	W B BR	40

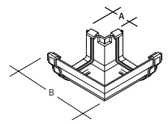
When used with 2 hole screw fixings, brackets meet the heavy class of BS EN 1462

INTERNAL FASCIA BRACKET

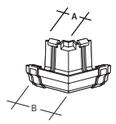


	Code	A	B	Colour	Qty
	RCK52	84	54	W B BR	40

EXTERNAL ANGLES



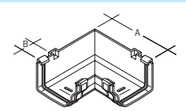
Angle	Code	A	B	Colour	Qty
90°	**RCA51**	52	189	W B BR	10



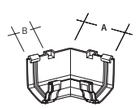
Angle	Code	A	B	Colour	Qty
45°	**RCA511**	52	109	W B BR	15

Angle	Code	A	B	Colour	Qty
30°	**RCA510**	59	95	W BR	10

INTERNAL ANGLES



Angle	Code	A	B	Colour	Qty
90°	**RCA52**	189	50	W B BR	10



Angle	Code	A	B	Colour	Qty
45°	**RCA522**	109	50	W B BR	15

Special gutter angles are available to order. Please state angle required.

External

	Code	Colour	Qty
	RFB401	W B BR	

Internal

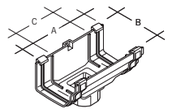
	Code	Colour	Qty
	RFB501	W B BR	

CAD drawing available to download from marley.co.uk

Product specifications

Classic 116 x 75mm ogee style system

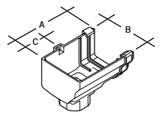
RUNNING OUTLET



Code	A	B	C	Colour	Qty
RCO50	222	135	125	W B BR	15

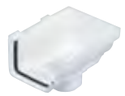
Suitable for both 68mm circular or 65mm square downpipe

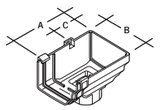
STOPEND OUTLET



Left hand

Code	A	B	C	Colour	Qty
RCO51	177	135	66	W B BR	15





Right hand

Code	A	B	C	Colour	Qty
RCO52	177	135	66	W B BR	15

Suitable for both 68mm circular or 65mm square downpipe

EXTERNAL STOPEND

Left hand

Code	A	Colour	Qty
RCE51	41	W B BR	15

Right hand

Code	A	Colour	Qty
RCE52	41	W B BR	15

SPARE CLIP

Code	A	Colour	Qty
RCC51	24	W B BR	30

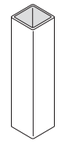
SPARE GUTTER SEAL

Code	Colour	Qty
RNG80	B	

Classic is manufactured to BS EN 607

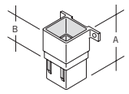
Square downpipe 65mm system

PIPES



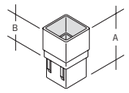
Size	Code	Colour	Qty
3m	RPE3	W B BR	6
5.5m	RPE2555	W B BR	2

SOCKETS



With fixing lugs

Code	A	B	Colour	Qty
RLE1	82	42	W B BR	10



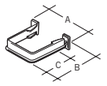
Plain

Code	A	B	Colour	Qty
RLE11	82	42	W B BR	10

CLIPS

One piece 8mm screw fixing holes

Code	A	B	Colour	Qty
RCE1	88	40	W B BR	30



One piece stand off

Code	A	B	C	Colour	Qty
RCE3	107	96	65	W B BR	5

Pipe clip including nut and bolt for use with RCB300 backplate

Code	A	Colour	Qty
RCE2	56	W B BR	10

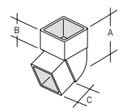
Backplate for use with RCE2 clip

Code	A	B	Colour	Qty
RCB300	48	30	W B G BR SD	20

Nuts and bolts 20mm x 6mm

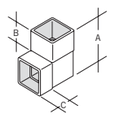
Code	Qty
RNB11	20

OFFSET BENDS



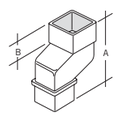
Angle	Code	A	B	C	Colour	Qty
67½°	RBE1	75	42	40	W B BR	15

Socket/spigot



Angle	Code	A	B	C	Colour	Qty
87½°	RBE3	104	40	28	W B BR	15

Socket/socket



Code	A	B	Colour	Qty
RNE1	142	42	W B BR	10

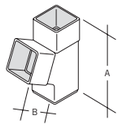
Socket/spigot
50mm projection

Square downpipe is manufactured to BS EN 12200
CAD drawing available to download from marley.co.uk

Product specifications

Square downpipe 65mm system

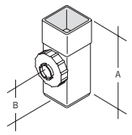
BRANCH



Angle	Code	A	B	Colour	Qty
67½°	**RYE1**	158	75	W B BR	15

Socket/spigot

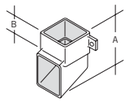
ACCESS PIPE



Code	A	B	Colour	Qty
RFB91	222	95	W B BR	30

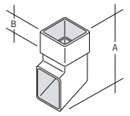
Socket/spigot

SHOES



With fixing lugs

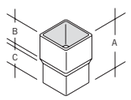
Code	A	B	Colour	Qty
RSE1	115	40	W B BR	15



Plain

Code	A	B	Colour	Qty
RSE2	140	40	W B BR	15

OUTLET ADAPTOR



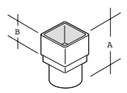
Code	A	B	C	Colour	Qty
RLE3	96	51	41	W B BR	30

68mm circular spigot to 65mm square socket

DRAIN ADAPTORS

Code	A	Colour	Qty
RLE2	77	W B BR	

Adapts 65mm square socket to 68mm socketed pipe



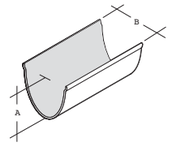
Code	A	B	Colour	Qty
RLE4	98	40	W B BR	

Adapts 65mm square socket to 68mm plain ended pipe

Square downpipe is manufactured to BS EN 12200

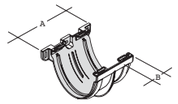
Deepflow150 150 x 98mm high capacity system

GUTTER



Size	Code	CSA mm²	A	B	Colour	Qty
4m	**RGJ4**	10,060	98	155	W B BR	4

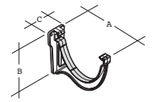
UNION BRACKET



Code	A	B	Colour	Qty
RUJ1	166	40	W B BR	8

Adaptors to join different gutter profiles are available to order

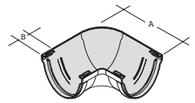
FASCIA BRACKET



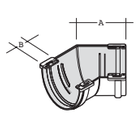
Code	A	B	C	Colour	Qty
RKJ1	174	125	49	W B BR	20

When used with 2 hole screw fixings, brackets meet the heavy class of BS EN 1462

ANGLES



Angle	Code	A	B	Colour	Qty
90°	**RAJ1**	241	40	W B BR	4

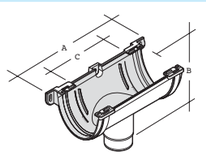


Angle	Code	A	B	Colour	Qty
45°	**RAJ2**	140	40	W B BR	1

Special gutter angles are available to order. Please state angle required

Code	Colour
RFB150	W B BR

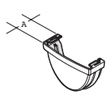
RUNNING OUTLET



Code	A	B	C	Colour	Qty
ROJ1	281	192	160	W B BR	20

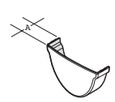
82mm circular outlet

STOP ENDS



External

Code	A	Colour	Qty
REJ1	55	W B BR	4



Internal

Code	A	Colour	Qty
REJ2	44	W B BR	4

NOTCH ADAPTOR

Code	A	B	Colour	Qty
RGNA1	16	18	B	20

To adapt fitting for notch jointing

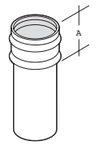
Deepflow150 is manufactured to BS EN 607

CAD drawing available to download from marley.co.uk

Product specifications

Circular downpipe 82mm system

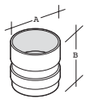
DOWNPIPE



Size	Code	A	Colour	Qty
3m	**RPH33**	61	W B BR	4
5.5m	**RPH355**	61	W B BR	4

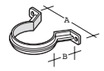
5.5m length available to order

SOCKET



Size mm	Code	A	B	Colour	Qty
	RL3	87	103	W B BR	4

CLIPS



One piece

Code	A	B	Colour	Qty
RC3	125	93	W B BR	10

Pipe clip including nut and bolt

Code	A	Colour	Qty
RC32	70	W B BR	20

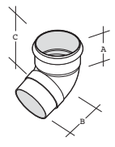
Backplate for use with RC32 clip

Code	A	B	Colour	Qty
RCB300	48	30	W B BR	20

Nuts and bolts 20mm x 6mm

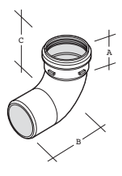
Code	Qty
RNB11	20

OFFSET BEND

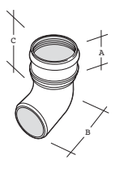


Angle	Code	A	B	C	Colour	Qty
67°	**RLE3**	43	78	76	W B BR	4

BENDS



Angle	Code	A	B	C	Colour	Qty
87½°	**RB31***	49	115	138	W B BR	4

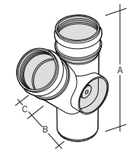


Angle	Code	A	B	C	Colour	Qty
45°	**RB33***	49	78	70	W B BR	4

82mm circular downpipe is manufactured to BS EN 12200. *SR31T seals may be fitted if required

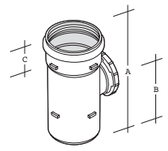
Circular downpipe 82mm system

BRANCH



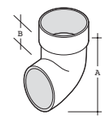
Angle	Code	A	B	C	Colour	Qty
45°	**RY3***	229	130	55	W B BR	24

ACCESS PIPE



Code	A	B	C	Colour	Qty
RF3*	205	101	52	W B BR	54

SHOE



Code	A	B	Colour	Qty
RS3	118	22	W B BR	4

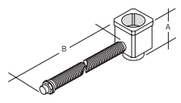
To order further commercial systems, please contact your Project Sales Manager.

82mm circular downpipe is manufactured to BS EN 12200. *SR31T seals may be fitted if required
CAD drawing available to download from marley.co.uk

Product specifications

Ancillary items

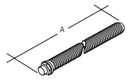
RAIN DIVERTER



Code	A	B	Colour	Qty
RD25R	105	500	W B G BR	20

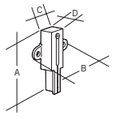
Suitable for use with 68mm circular or 65mm square PVCu downpipes

WATER BUTT CONNECTOR



Code	A	Colour	Qty
RDC26R	500	B	10

FASCIA BRACKET SPACER/HEIGHT ADJUSTER



Code	A	B	C	D	Colour	Qty
RGS1	94	48	17	17	W B	45

Includes nut and bolt.
Suitable for use with Deepflow, Clip-master, Flowline and Classic fascia brackets.
25mm height adjustment

ANGLED FASCIA BRACKET ADAPTOR

Angle	Code	Qty
22½°	**RKA1**	50
30°	**RKA2**	100

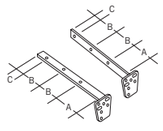
Galvanised mild steel

EXTENSION BACKPLATE

Code	A	B	Colour	Qty
RT200	104	45	W B G BR SD	50

PVCu
For use with RC251/2, RCE2 and RC32 pipe clips

FIXED RAFTER ARMS



Side

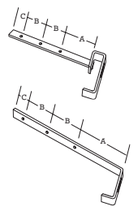
Angle	Code	A	B	C	Qty
22½°	**RSA1**	50	75	25	50

Top

Angle	Code	A	B	C	Qty
22½°	**RTA1**	100	75	25	50

Electroplated mild steel
Includes 2 cadmium plated nuts and bolts

ADJUSTABLE RAFTER ARMS



Side

Code	A	B	C
RSA1A	123	75	25

Top

Code	A	B	C
RTA1A	65	75	25

Galvanised steel
Including nut, bolt and antislip washer.

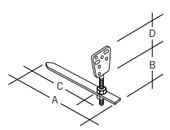
SPARE NUTS AND BOLTS

Size mm	Code	Qty
12x5	**RNB21**	10

110mm circular downpipe is manufactured to BS EN 1329-1
CAD drawing available to download from marley.co.uk

Ancillary items

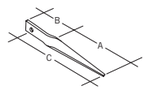
RISE AND FALL EXTENSION ARM



Code	A	B	C	Qty
RKF1	290	100	235	50

Electroplated mild steel
Including 2 cadmium plated nuts and bolts

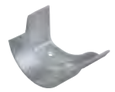
DRIVE-IN SPIKE

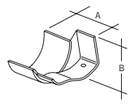


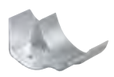
Size mm	Code	A	B	C	Qty
	RSS1°	115	58	154	50

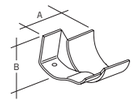
Galvanised mild steel

CLIP-MASTER TO OGEE GUTTER ADAPTORS









Right hand

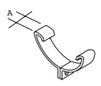
Code	A	B	Qty
RGA4	94	66	50

Left hand

Code	A	B	Qty
RGA5	94	66	50

Cast aluminium

HALF ROUND TO CAST IRON GUTTER ADAPTOR



Code	A	Colour	Qty
RGA1R	29	B	25

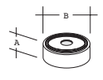
Suitable for adapting 100mm to 112mm half round
Other gutter adaptors are available to order

UNIVERSAL GUTTER NOTCHING TOOL

Code	Qty
RGN1	

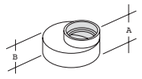
Suitable for use with Deepflow, Clip-master, Flowline, and Deepflow150 gutter systems

DRAIN ADAPTORS



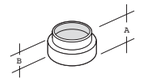
Code	A	B	Colour	Qty
RA42	31	104	B	100

Can be cut to fit all shapes and sizes of downpipe



Code	A	B	Colour	Qty
RRM425	40	25	W B G BR	10

110mm socket to 68mm socket



Code	A	B	Colour	Qty
SRM325	35	20	B G	30

82mm socket to 68mm socket

GUTTER SEAL

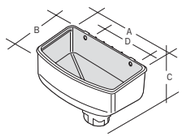
Code	Qty
RNG50	

Suitable for use with Deepflow, Clip-master, Flowline, and Deepflow150 gutter systems.

Cut to required length

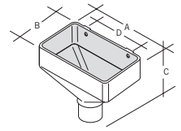
Product specifications

Hopper heads



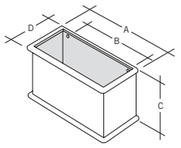
Size mm	Code	A	B	C	D	Colour	Qty
68/65	**RH252**	308	174	220	200	W B G BR	6

Dual spigot outlet



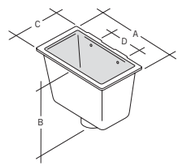
Size mm	Code	A	B	C	D	Colour	Qty
82	**SH30**	280	155	230	177	W B G BR SD	6

Circular spigot outlet



Size mm	Code	A	B	C	D	Colour
68	**RH25**	425	298	238	190	B
110	**SH40**	425	298	238	150	B G

Circular spigot outlet

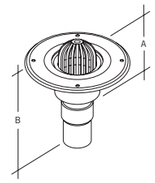


Size mm	Code	A	B	C	D	Colour
160	**SH60°**	406	375	248	254	G

Circular spigot outlet

PVCu Flat roof outlets

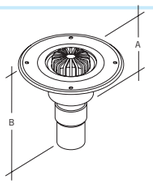
FLAT ROOF OUTLET



Size mm	Code	A	B	Colour	Qty
68	**ROF25**	343	506	G	3

Items are supplied bagged loose for site assembly

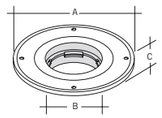
BALCONY OUTLET



Size mm	Code	A	B	Colour	Qty
68	**ROB25**	343	506	G	3

Items are supplied bagged loose for site assembly

UNIVERSAL FLANGE



Code	A	B	C	Colour	Qty
SOF1	343	180	55	G	5

Flange is 3mm thick

FLAT ROOF OUTLET GRATING

Code	Colour	Qty
SOF12	G	25

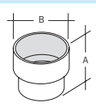
For use with SOF1

BALCONY OUTLET GRATING

Code	Colour	Qty
SOB1	G	35

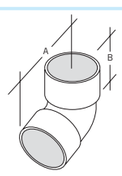
For use with SOF1

STRAIGHT FLANGE CONNECTOR



Size mm	Code	A	B	Colour	Qty
82	**SGS31G**	133	137	G	20
110	**SGS41W**	139	134	W	20

BENT FLANGE CONNECTOR



Size mm	Code	A	B	Colour	Qty
110	**STS41W**	104	156	W	45

Socket/socket

CAD drawing available to download from marley.co.uk

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Plumbing & Drainage Solutions

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email: marketing@marleypd.com

For Technical advice please call
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