



Rainwater Systems



marleypd.co.uk





Marley Rainwater Systems

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 marleypd.co.uk or available via the literature hotline 01622 852585.









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The systems





Applications

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









Rainwater system	Conservatories	Small to medium houses	Medium to large houses	Flats, small to medium commercial projects
Deepflow	•	•	•	•
Clip-master	•	•	•	
Flowline	•	•	•	
Deepflow150			•	•
Classic	•	•	•	•

Ideal applicationSuitable

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).

ownpipe:		Colours available:
) 68mm	☐ 65mm	



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:		Colours available
O _{68mm}	☐ 65mm	



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:	Colours availabl
O 68mm □ 65mm	



Deepflow150 155 x 98mm high capacity semi-elliptical system

Deepflow 150 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: Colours available: O_{82mm}



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.









Rainwater systems that stay looking better for longer

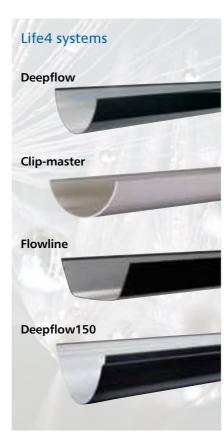
We're all affected by the steady advance of time, as years of exposure affects how everything looks. To combat this Marley Plumbing & Drainage have advanced their manufacturing process to create Life4.

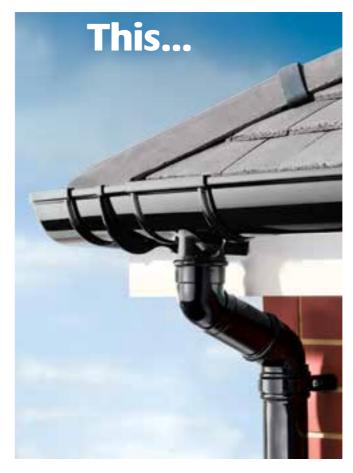
Looks better...

Life4 rainwater systems can withstand exposure for up to four times longer than standard PVCu rainwater gutters and downpipes and have high gloss levels that are consistent with the fittings, improving the overall aesthetic of the system.

...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).





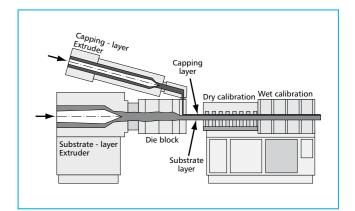


Life4 - the performance standard

The benchmark for weathering tests for rainwater systems is set out within the European standards*. The weathering test essentially mimics actual conditions, but also accelerates them in order that long term performance may be assessed. Life4 products have been assessed and can perform up to four times longer than standard PVCu.

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 inside layer of the product is standard PVCu. The overall system contains a minimum 15% recycled material.

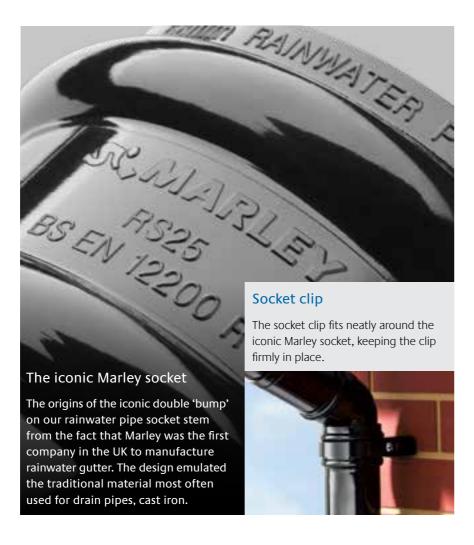


^{*}BS EN 607: Eaves gutters and fittings – PVCu and EN 12200-1: Plastics rainwater piping systems for above ground external use – PVCu. (These standards replace the previous British Standard, BS4576.)

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.



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 unions and outlets 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 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 pi

Two piece pipe clip

Hopper head (RH252)

Designed with a curved front the RH252 hopper head is suitable for use with the 68mm circular or 65mm square downpipe.



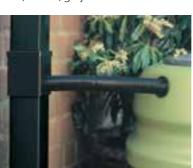
With square downpipe



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 Oqee cast aluminium are all available as standard items.



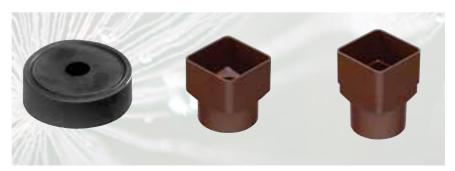
Clip-master to Flowline adaptor (RGA2R)

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: 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.

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.

Gutter length

On long runs frictional resistance can reduce gutter capacity and efficiency. To allow for this, reduction factors can be applied or gutters sized to allow freeboard in accordance with BS EN 12056-3: recommendations.

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.

Long roofs

The spread of water as it leaves the roof edge varies considerably depending on the roof surface and pitch. On long roofs it may be necessary to select a wider gutter than capacity calculations would normally dictate. This is particularly important with sheet metal or similar profiled roofs where there is a tendency for the discharge to follow the roof angle and overshoot the gutter.

4. Rainwater pipe sizes

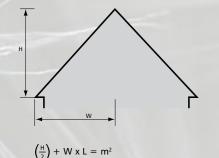
With the exception of the Deepflow150 gutter system which has an 82mm diameter downpipe, all other Marley PVCu gutter systems incorporate outlets suitable for 68mm circular or 65mm square rainwater pipes. This size of downpipe has been selected as it has the necessary capacity to accommodate the maximum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

5. 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	247m²	5.14l/s
RH25	68mm	360m²	7.56l/s
SH30	82mm	196m²	4.11l/s
SH40	110mm	720m²	15.12l/s

Effective roof area

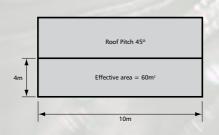


For example a roof 4m

 $2 + 4 \times 10 = 60 \text{m}^2$

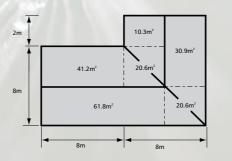
high x 4m wide x 10m long

Multiplication factor method



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

 $4m \text{ wide x } 10m \log x \ 1.5 = 60m^2$



Outlet at one end



	le	vel	fall 1:600	
Gutter system	m²	I/s	m²	I/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						
	le	vel	fall 1:600			
Gutter system	m ²	I/s	m²	I/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 ove figures by 5%

Outlet in centre



	level		fall 1	:600	
Gutter system	m²	I/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: 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 a 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 qutter. 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 qutters.

Fascia brackets

All Marley PVCu gutter fascia brackets have been tested to the loading requirements 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.

However, in areas where particularly high snow falls and severe icing might be expected, it is recommended that snow boards be fitted to the eaves of the pitched roofs. This precaution should also be considered wherever sliding snow might cause damage or injury to structures or persons below.

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 11/4" x 10g (32mmx5mm) pan or round head nonferrous 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.

Gutter brackets

Gutter unions, outlets and stopends must have a fascia bracket fitted within 150mm of one side of the fitting for support.

Internal and external angles require supporting brackets positioned on both sides within 150mm.

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.



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.

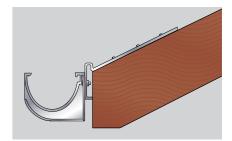
It is recommended that notched gutters are used on buildings without fascia boards as key fittings such as unions and outlets do not need to be secured and can be positioned adjacent to structural fixing points. Top rafter brackets, RTA1 or RTA1A, will need to be fitted before the roof is tiled. Side 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.

Rise and fall brackets

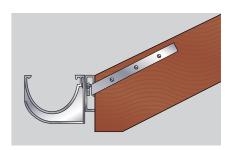
Rise and fall brackets, RKF1, can be used with clip-jointed gutters although a notched system is recommended as described for rafter arm fixing above. Nuts and bolts are supplied to secure fascia brackets to the multi-fit face plate. It is recommended that pilot holes are drilled in mortar joints before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

Angle fascia bracket

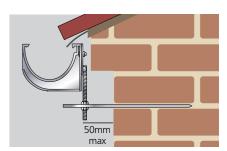
Angle fascia bracket adaptors, RKA1, RKA2, are required when a sloping fascia board is employed at the eaves. The galvanised mild steel adaptor is fitted behind the fascia bracket with two 13/4" x 10g (45x5mm) non-ferrous round head screws passing through both bracket and adaptor.



RTA1A adjustable top rafter arm, RTA1 also available

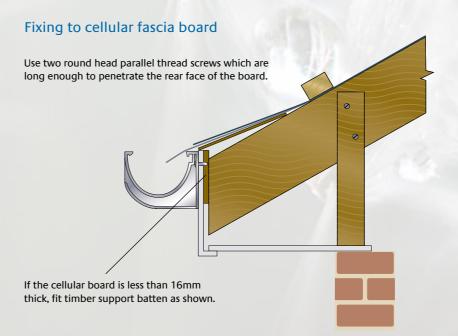


RSA1A adjustable side rafter arm RSA1 also available



RKF1 rise and fall bracket







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 The **Classic** system is jointed by means systems are jointed via the innovative easyclip which makes of pre-fitted clips on all fittings. it simple to joint the gutter and fitting, but it is also very easy to take apart if necessary. Screw hole fixing options to anchor fitting to fascia Screw hole fixing to anchor fitting Gutter insertion Gutter insertion depth mark

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.marleypd.co.uk





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 where suitable.

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

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.

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.

Small offsets can be achieved using offset bends RNE252 and RNE253 where a minimum projection of 25mm is obtainable.

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 2m 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.

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.

Roof and balcony outlets

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

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 & General Information

British & European Standards

BS EN 12056-3: 2000

Gravity drainage inside buildings: Roof drainage, layout and calculation.

Eaves gutters & fittings - PVCu. Definitions, requirements and testing.

Plastics rainwater piping systems for above ground external use - PVCu.

Gutter brackets. Classification, requirements & testing.

BS EN 681-1

Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications. Part 1 vulcanised rubber.

BS 4255-1

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





General Information

Inspection and testing

All newly installed gutters and pipework should be tested in accordance with the appropriate standards. These requirements may vary according to locality of installation and, for guidance, attention is drawn to BS EN 12056-3: 2000, Gravity drainage inside

Handling

PVCu gutters and pipes are strong, though lightweight, and are therefore easily handled. However reasonable care should be exercised whilst handling in extremely cold conditions.

To protect the high gloss level of Life4 gutter and downpipes, they are packed into plastic sleeving to prevent accidental damage. When removing from sleeving, ensure that the external face is uppermost and handle with care to ensure that the profiles do not rub against each other.

To preserve the appearance of the self-coloured material, when products are delivered to site, they should preferably be placed inside a storage building.

Gutters and pipes should be well supported on suitable racks. Dividing the framework or shelves into sections helps to segregate different products and prevents overloading and possible distortion of bottom layers.

Pipes and gutter bundles should be stacked no more than seven high. If it is necessary to store in the open for long periods, or if products are to be exposed to strong sunlight, they should be covered with an opaque sheet. Fittings supplied in cardboard boxes or polythene bags should be stored under cover and kept packed until required.

Solvent cement must be securely stored in a cool place out of direct sunlight and away from any heat source.

The relevant regulations are outlined in the Health and Safety at Work Act 1974 and should be followed. Hazard sheets, dealing with the potential hazards of working with solvent cement and silicone lubricant are available from Marley Plumbing & Drainage.

Refer to C.D.M. regulations (Code of Practice and Designing for Health and Safety in Construction 1995).

Maintenance

Marley PVCu Rainwater systems are corrosion resistant and self coloured, the material therefore does not require painting. If, however, at any time painting is required, a paint specific for use with PVC is recommended.

Timber fascias that have been treated with timber preservatives.

Marley system solutions



Marlev PVCu Soil

Standard PVCu soil systems to BS EN 1329. 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.



Marlev 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 acoustic

An acoustic soil and waste range with a 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. Available with solvent weld compression and push fit jointing.



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.



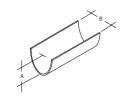
Alutec offer modern and traditional aluminium rainwater profiles, providing solutions for any type of building. Aluminium has high visual appeal and durability, lasting for 50 years or more. The product portfolio includes Evolve; easy to install, low cost gutter systems in four profiles. The rainwater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



Deepflow 110 x 75mm semi-elliptical system

GUTTER

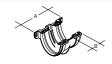




Size	Code	CSA mm²	Α	В	Colour		Qty
3m	RGD3	6043	75	110	W B G BR	$\mathbb{A} \mathbb{A}$	5
4m	RGD4	6043	75	110	W B G BR	$\not \triangleright \triangle$	5

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	Α	В	С	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	Α	В	Colour	Qty
90°	RAD10	176	40	W B G BR	₽ 20





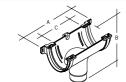
Angle	Code	A E	B Colour	Qty
45°	RAD20	108 8	0 WBGBI	R ♥ 15

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

Code	Colour	Qty
RFB21	W B G BR	1

RUNNING OUTLET





	Code	A B C	Colour	Qty
	ROD10	275 164 153	W B G BR	₽ ♥ 12
68n	nm circular spigot			

STOPEND OUTLET





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

EXTERNAL STOPEND





Code	Α	Colour	Qty
RED10	44	W B G BR	₽ ♥ 40

NOTCH ADAPTOR







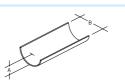
	В	Colour	Qty
RGNA1 16	18	В	20

To adapt fitting for notch jointing

Clip-master 112 x 49mm 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	А В	Colour	Qty
RUC1	155 40	W B G BR	₽ ♥ 15

FASCIA BRACKET





Code	А	В	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					

1	~]



50	IVACI	170	-1 0	VV D G DK	A A	10
Angle	Code	Α	В	Colour		Qty
						٠,

110 80

W B G BR

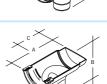
W B G BR

RUNNING OUTLET



Special gutter angles are available to	order	. Pleas	e state	e angle required.	
Code				Colour	Qty
RFB104				W B G BR	1
Code	Α	В	С	Colour	Qty
ROC1	275	138	155	W B G BR	₽ ♥ 15
68mm circular spigot					





Code	А В С	Colour	Qty
ROC2	228 138 10	5 WBGBR	₽ ♥ 15
68mm circular spigot			

EXTERNAL STOPEND





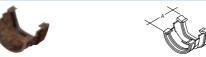
Code	Α	Colour	Qty
REC1	40	W B G BR	₽ 20

SPARE CLIP



Code	Α	Colour	Qty
RCC1	24	W B G BR	30
For use with old strapped system only			

CLIP-MASTER TO FLOWLINE ADAPTOR



×_	Code	A B	
	RGA2R	87 72	
	Other gutter adaptors are avail	lable to order	

NOTCH ADAPTOR





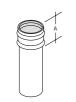


RGNA1 16 18 To adapt fitting for notch jointing

Circular downpipe 68mm system

PIPES





Size	Code	Α	Colour	Qt
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

CLIPS





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	Α	В	Colour	Qt	
	RLR25	92	50	W B	k♥ 10	





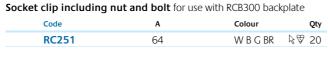
0	ne piece 8mm screw fix	ing holes			
	Code	Α	В	Colour	Qty
	RCZ253	94	72	W B G BR	₿₿ 30





Code	А В	Colour	Qty
RCZ253	94 72	W B G BR	₽ ♥ 30

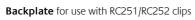












	,			
Code	Α	В	Colour	Qty
RCB300	48	30	W B G BR	₽ ♥ 20



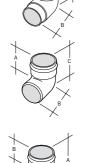
Nuts and bolts 20mm x 6mm

	Code					Qty
	RNB11					20
Angle	Code	Α	В	С	Colour	Qty



BENDS





Angle	Code	Α	В	С	Colour	Qty
37½°	RB251	48	75	81	W B G BR	₽ ₩ 25

Angle	Code	Α	В	С	Colour	Qty
67½°	RB252	38	60	66	W B G BR	♥ 25

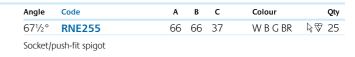
Angle	Code	Α	В	С	Colour	Qty
45°	RB253	48	53	63	W B G BR	₽ 25
Socket/s	spigot					

Circular downpipe 68mm system

OFFSET BENDS











Angle	Code	Α	В	Colour	Qty
67½°	RNA250	41	15	W B G BR	₹ 10
Socket/s	socket. For deep fascias				











Angle	Code	A B	Colour		Qty
20°	RNE253	56 15	W B G BR	B	10
Socket/	spigot. For 25mm offse	t construction			

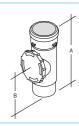




Angle	Code	Α	В	Colour	Qt
67½°	RY252	196	90	W B G BR	R♥ 10
Socket/s	pigot				

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	k♥ 15

LEAF GUARD

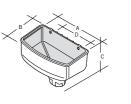




Code	Α	В	C	Colour	Qty
RV225	64	55	18	W B G BR	30

HOPPER HEAD





Code	A B C D Colour	Qty
RH252	308 174 220 200 W B G BR	♥ 6
RH25	425 298 238 190 B	1

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

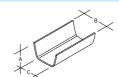
For further hopper heads please see page 34.

22 | MARLEY Rainwater Systems 68mm circular downpipe is manufactured to BS EN 12200 MARLEY Rainwater Systems | 23 以 CAD drawing available to download from marleypd.co.uk

Flowline 112 x 60mm rectilinear system

GUTTER





Size	Code	CSA mm²	Α	В	С	Colour	Qt
4m	RGF4	5412	60	112	80	W B BR	₽ ♥ 5





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

FASCIA BRACKET





Size mm	Code	Α	В	С	Colour	Qty
	RKF2	132	85	48	W B BR	% ♥ 40

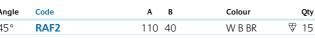
When used with 2 hole screw fixings, brackets meet the heavy class of BS EN 1462





Angle	Code	Α	В	Colour		Qty
90°	RAF1	188	40	W B BR	$\mathbb{A} \mathbb{A}$	20





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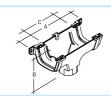
Code		Colour	Qty
RFB102		W B BR	1
Code	A B C	Colour	Qty
ROF1	275 134 155	W B BR	₽ ♥ 12

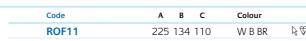
Suitable for both 68mm circular or 65mm square downpipe

Suitable for both 68mm circular or 65mm square downpipe



RUNNING OUTLET







Code	Α	Colour	Qty
REF2	53	W B BR	₽ ♥ 20

SPARE CLIP





	Code	Α	Colour	Qt
	RCF1	24	W B GR	30
For use	e with old strapped s	system only		

CLIP-MASTER TO FLOWLINE ADAPTOR





Code	А В	Colour	Qty
RGA2R	87 72	W B BR	1
an author adaptara are avail	abla ta audau		

NOTCH ADAPTOR







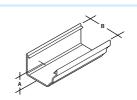
Code	A B	Colour	Qty
RGNA1	16 18	В	20

To adapt fitting for notch jointing

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	k 15

Adaptors to join different gutter profiles are available to order

EXTERNAL FASCIA BRACKET





Code	Α	В	С	Colour		Qty
RCK51	98	136	54	W B BR	R	40

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

INTERNAL FASCIA BRACKET

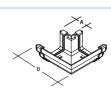




Code	Α	В	Colour		Qty
RCK52	84	54	W B BR	R	40

EXTERNAL ANGLES





Angle	Code	А В	Colour		Qty
90°	RCA51	52 189	W B BR	R	10



Angle	Code	Α	В	Colour	Qty
45°	RCA511	52	109	W B BR	15

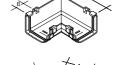


INTERNAL ANGLES

P			

Angle	Code	Α	В	Colour	Qty
30°	RCA510	59	95	W BR	10





Angle	Code	Α	В	Colour	Qty
45°	RCA522	109	50	W B BR	15



45°	RCA522	109 50	W B BR	1

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

External

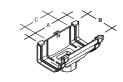
Code	Colour	Qty
RFB401	W B BR	1
Internal		
Code	Colour	Qty
RFB501	W B BR	1

24 | MARLEY Rainwater Systems Flowline and Classic are manufactured to BS EN 607 MARLEY Rainwater Systems | 25 以 CAD drawing available to download from marleypd.co.uk

Classic 116 x 75mm ogee style system

RUNNING OUTLET

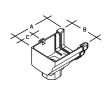




Code	Α	В	С	Colour		Qty
RCO50	222	135	125	W B BR	B	15
Suitable for both 68mm circular of	or 65mm s	square	e dowr	npipe		

STOPEND OUTLET





Left hand				
Code	A B	С	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

RCE52

EXTERNAL STOPEND





Left hand						
	Code	A	Colour	Qty		
	RCE51	41	W B BR	15		





Right hand		
Cada	Calana	٥.

SPARE CLIP





Code	Α	Colour	Qty
RCC51	24	W B BR	30

SPARE GUTTER SEAL

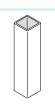


Code	Colour	Qty
RNG80	В	1

Square downpipe 65mm system

PIPES





Size	Code	Colour	Qty
3m	RPE3	W B BR	9 6
5.5m	RPE2555	W B BR	7 2

SOCKETS



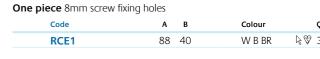


With fi	xing lugs				
	Code	Α	В	Colour	Qty
	RLE1	82	42	W B BR	k♥ 10
Plain					
	Code	Α	В	Colour	Qty
	RLE11	82	42	W B BR	₩ 10

CLIPS













Nuts and bolts 20mm x 6mm

Code RNB11





Pipe clip including nut and bolt for use with RCB300 backplate						
Code	Α	Colour	Q			
RCE2	56	W B BR	♥ 1			





Backplate for use with RCE2 clip						
	Code	Α	В	Colour	Qty	
	RCB300	48	30	W B G BR	♥ 20	

OFFSET BENDS





Angle	Code	Α	В	С	Colour	Q
67½°	RBE1	75	42	40	W B BR	₩ 1
Socket/s	pigot					





Angle	Code	Α	В	С	Colour	Qty
87½°	RBE3	104	40	28	W B BR	₽ ♥ 15
Socket/so	ocket					





Code	A B	Colour	Qty
RNE1	142 42	W B BR	♥ 10
Socket/spigot			

Socket/spigot 50mm projection

Square downpipe 65mm system

BRANCH





Angle	Code	Α	В	Colour	Qty
67½°	RYE1	158	75	W B BR	₽ ♥ 15
Socket/s	pigot				

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	Α	В	С	Colour	Qty
RLE3	96	51	41	W B BR	♥ 30
Comm singular animat to CEmps		l.a.t			

DRAIN ADAPTORS







Code	Α	Colour	Qty	
RLE2	77	W B BR	♥ 1	
Adapts 65mm square socket to 68mm socketed pipe				

Square downpipe is manufactured to BS EN 12200

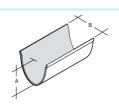
RLE4 W B BR

Adapts 65mm square socket to 68mm plain ended pipe

Deepflow150 155 x 98mm high capacity system

GUTTER





Size	Code	CSA mm²	Α	В	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	B	8

Adaptors to join different gutter profiles are available to order

L	



Code	^	ь	_	Coloui		QLy
RKJ1	174	125	49	W B BR	R	20
When used with 2 hole screw fixing	ngs, brack	ets me	eet th	ne heavy class of B	S EN 1	462

ANGLES





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





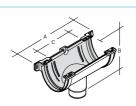
Angle	Code	A B	Colour	Qty
45°	RAJ2	140 40	W B BR	1

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

Code	Colour	
RFB150	W B BR	1

RUNNING OUTLET





Code	Α	В	С	Colour		Qty
ROJ1	281	192	160	W B BR	R	20
82mm circular outlet						

STOPENDS





t	External							
	Code	Α	Colour		Qty			
	REJ1	55	W B BR	R	4			





Internal			
Code	Α	Colour	Qty

NOTCH ADAPTOR





nternal				
Code	Α	Colour		Qty
REJ2	44	W B BR	R	4

RGNA1

To adapt fitting for notch jointing

Circular downpipe 82mm system

DOWNPIPE





Size	Code	Α	Colour	Qt
3m	RPH33	61	W B BR	№ 4
5.5m	RPH355	61	W B BR	4

5.5m length available to order

SOCKET

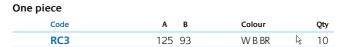




Size mm	Code	Α	В	Colour		Qty
	RL3	87	103	W B BR	B	4

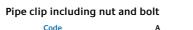














Code	Α	Colour	Qty
RC32	70	W B BR	20



Backplate for use with RC32 clip							
Code	Α	В	Colour	Qty			
RCB300	48	30	W B BR	♥ 20			

Nuts and bolts 20mm x 6mm

Code		Qty
RNB11		20

OFFSET BEND





Angle	Code	Α	В	С	Colour		Qty
67°	RLE3	43	78	76	W B BR	ß	4

BENDS





Angle	Code	Α	В	С	Colour		Qty
87½°	RB31*	49	115	138	W B BR	R	4





Angle	Code	Α	В	С	Colour		Qty
45°	RB33*	49	78	70	W B BR	R	4

82mm circular downpipe is manufactured to BS EN 12200. *SR82T 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	Α	В	С	Colour		Qty
RF3*	205	101	52	W B BR	G.	54

A B

118 22

SHOE

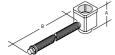




Ancillary items

RAIN DIVERTER





Code	A B	Colour	Qty
RD25R	105 500	W B G BR	20
Suitable for use with 68mm circle	ular or 65mm square P	VCu downpipes	

WATER BUTT CONNECTOR





Code	Α	Colour	Qty
RDC26R	500	В	10

FASCIA BRACKET SPACER/HEIGHT ADJUSTER





Code	Α	В	С	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
Galvanise	ed mild steel	

EXTENSION BACKPLATE





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

PVCu

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

EXTENSION BRACKET





Code	A B	Colour	Qty
RT250	243 114	BG	20

FIXED RAFTER ARMS

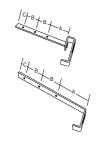




ide						
ngle	Code	Α	В	С	Q	ty
2½°	RSA1	50	75	25	5	0
ор						
ngle	Code	Α	В	С	Q	ty
2½°	RTA1	100	75	25	5	0
actron!	ated mild steel					

ADJUSTABLE RAFTER ARMS





Side					
	Code	Α	В	c	Qty
	RSA1A	123	75	25	1
Тор					
	Code	Α	В	С	
	RTA1A	65	75	25	1

Galvanised steel Including nut, bolt and antislip washer.

Includes 2 cadmium plated nuts and bolts

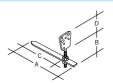
Ancillary items

SPARE NUTS AND BOLTS

Size mm	Code		Qty
12x5	RNB21		10

RISE AND FALL EXTENSION ARM





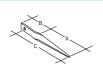
Code	А В С	Qty
RKF1	290 100 235	50

Electroplated mild steel

including 2 cadmium plated nuts and bolts

DRIVE-IN SPIKE

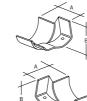




Size mm	Code	Α	В	С	Qty
	RSS1°	115	58	154	50
Galvanise	d mild steel				

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	Α	Colour	Qty
RGA1R	29	В	25

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

UNIVERSAL GUTTER NOTCHING TOOL



Code	Qty
RGN1	1
Suitable for use with Deepflow, Clip-master, Flowline, and Deepflow150 gutte	r systems

Qty 100

DRAIN ADAPTORS





Code	^	ь	
RA42	31	104	
Can be cut to fit all shapes and si	zes of dov	vnpipe	
G. I.			

Can be cut to fit all shapes and sizes of downpipe							
Code A B Colour							
RRM425	40 25	W B G BR	10				

110mm socket to 68mm socket



Code	Qty
RNG50	1

Suitable for use with Deepflow, Clip-master, Flowline, and Deepflow150 gutter systems. Cut to required length

Ancillary items

FLAT RAINWATER SEALS





Code	Colour	Qty
RNG60	В	5
Citable for the DCA1D and ald for a	1005)	

Suitable for use with RGA1R and old (pre-1985) rainwater systems which used flat seals. Cut to required length

SPARE RING SEALS

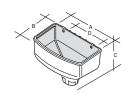




'T' ring		
Code	Colour	Qty
SR82T	В	5
To BS EN 681/1 82mm seal for use with RB31, RB33, RY3 and	RF3 fittings	

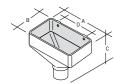
Hopper heads





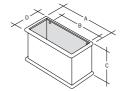
Size mm	Code	Α	В	С	D	Colour		Qty
68/65	RH252	308	174	220	200	W B G BR	\creen	6
Dual spig	ot outlet							





Size mm	Code	А	А В	С	D	Colour	Qty
82	SH30	28	30 155	230	177	W B G BR	6
Circular s	nigot outlet						



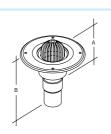


Size mm	Code	Α	В	С	D	Colour	Qty
68	RH25	425	298	238	190	В	1
110	SH40	425	298	238	150	BG	1
Circular spigot outlet							

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



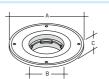


Size mm (Code	A B	Colour	Qty
68 F	ROB25	343 506	G	3

Items are supplied bagged loose for site assembly

UNIVERSAL FLANGE





Code	Α	В	С	Colour	Qty
SOF1	343	180	55	G	5

Flange is 3mm thick

FLAT ROOF OUTLET GRATING





Code	Colour	Qt
SOF12	G	2
For use with SOF1		

BALCONY OUTLET GRATING





	Code	Colour	Qty
	SOB1	G	35
_	11 0054		

For use with SOF1

STRAIGHT FLANGE CONNECTOR

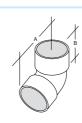




Size mm	Code	A B	Colour	Qty
82	SGS31G	133 137	G	♥ 20
110	SGS41W	139 134	W	♥ 20

BENT FLANGE CONNECTOR





Size mm	Code	A B	Colour	Qty
110	STS41W	104 156	W	♥ 45
Sockotic	ockot			



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