



FloPlast
building the future

"Cast Iron" Style Rainwater & Soil Systems



PVC-UE Roofline,
Window &
Cladding Systems

Rainwater
Systems

Soil & Waste
Systems

Underground Drainage
Systems

MDPE
Systems

Hot & Cold
Plumbing Systems

"Cast Iron" Style Rainwater Systems

FloPlast "Cast Iron" Style Rainwater Systems replicate traditional Cast Iron styling with all the benefits of PVC. The product is quick and easy to install, is corrosion free with no need for painting. FloPlast "Cast Iron" Style Rainwater gives the home owner all of the aesthetic features of traditional cast systems but at less than half the cost.

System Features and Benefits

- 3 profiles available - Half Round, Hi-Cap and Niagara®
- Lightweight and resilient material
- Reduced labour costs
- Ideal for new build and renovation projects
- Architectural features e.g. Hopper Motifs
- 10 Year "Cast Iron" Colour Guarantee

Standards/Quality Control

FloPlast consider that an integral part of our business undertaking is to minimise any potentially harmful effects on the environment that our activities may cause. FloPlast aim to take into account sustainability in our product design, applications and commitment to the protection of the environment and prevention of pollution, in all we do.

FloPlast operate both quality and environment management systems that have been accredited by BSI to BS EN ISO 9001:2008 Certificate No. FM 501414 and BS EN ISO 14001:2004 Certificate No. EMS 538445 respectively.



All products are subject to continuous quality control procedures and products manufactured to British Standard Specifications are marked accordingly.



Increasingly organisations need to demonstrate their environmental credentials to their customer. The Carbon Trust Standard certifies organisations for real carbon reduction and a commitment to ongoing reductions and is an award for organisations that can prove that they have measured, managed and reduced their carbon emissions year-on-year.

By reducing carbon emissions, FloPlast has demonstrated that taking action on climate change by proactively managing regulatory compliance delivers energy cost reductions, an enhanced reputation and satisfied employees & stakeholders.

As one of only a handful of companies within our industry to have achieved this award, it demonstrates that FloPlast is at the forefront of addressing environmental issues. The award is recognition of the action taken within the organisation to reduce our carbon footprint rather than paying others to offset it.



Transport, Handling and Storage

FloPlast "Cast Iron" Style pipes and gutters are supplied in secure bales bound with straps within timber frames, **FloPlast** recommend that movement of bales is carried out by fork lift or other mechanical device using webbing or rope strings. The bales may be stacked up to a maximum of three high, providing that the timber frames are placed on each other. Fittings are generally supplied in plastic bags and should be stored away from direct sunlight. If they have to be stored outside, the bags should be opened to prevent temperature build-up.

Terms and Conditions of Sale

Goods are sold subject to our Standard Terms and Conditions of Sale, copies of which are available upon request. **FloPlast Limited** reserve the right to modify or extend any product range or published information without prior notice.



FloPlast Marketing Support

Our in-house Marketing department can provide you with a range of support materials e.g. brochures, banners, stockist boards, bespoke leaflets, bin labels, P.O.S and posters. FloPlast is fully committed to working with its partners. As such, we are always receptive to new ideas and are open to discussing any Marketing initiatives, which our partners may wish to undertake.



"Cast Iron" Style Leaflets

Our "Cast Iron" Style information leaflets clearly identify codes and descriptions of each product range; user friendly to ensure smooth and efficient order process.



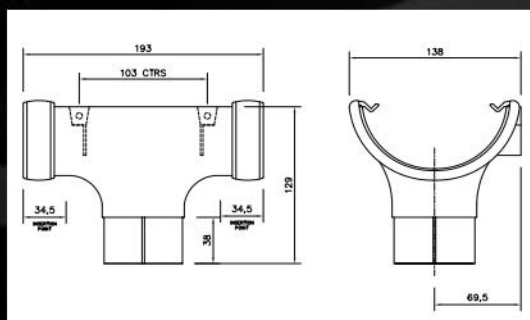
"Cast Iron" Style Rainwater Trade Counter Boards

Perfect for any Trade Counter, giving the customer a chance to see, touch and feel the product in the flesh and learn more.

To find out more about the items listed above, please contact your local FloPlast Representative or call our sales department on 01223 810000

FloPlast CAD drawings

The benefits of CAD drawings are well known by the Architect/Specifier community. Drawings are available to download for each product that FloPlast manufacture. Please visit www.floplast.co.uk and click on the 'links' section. For your convenience, files are downloadable as either a .dwg (primarily for CAD programs) or as a PDF for easy viewing. All files determine design lengths required by the Architect/Specifier to enable them to produce accurate drawings.



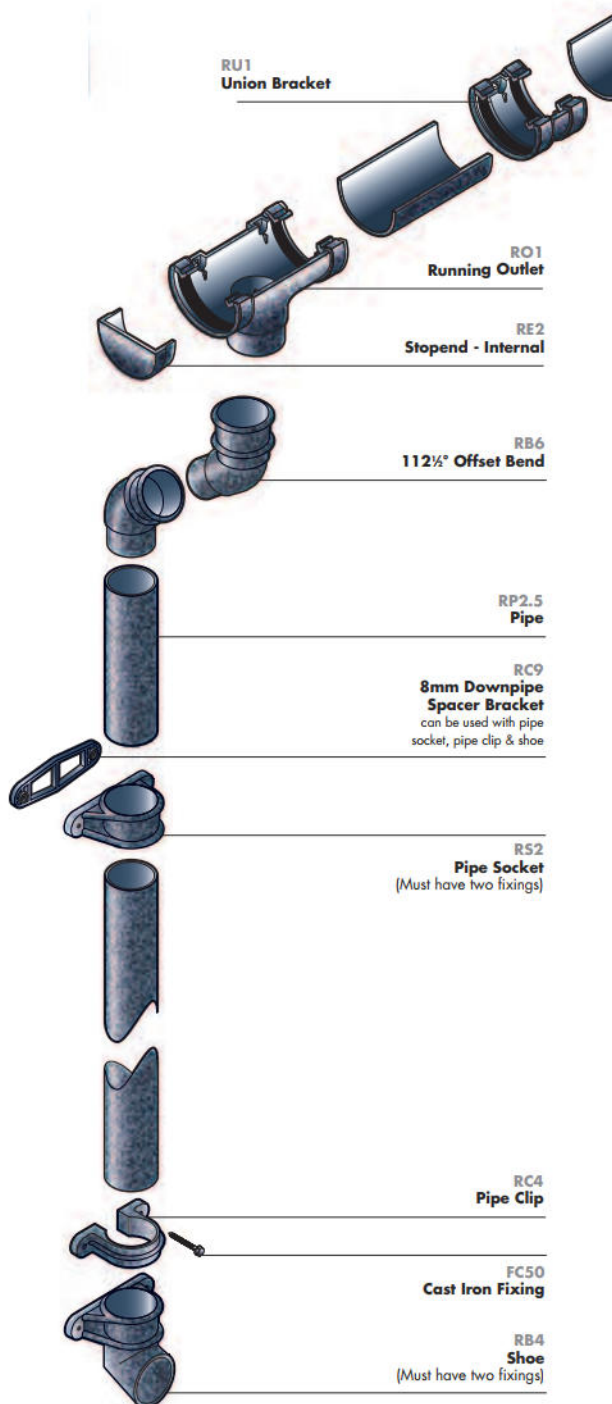
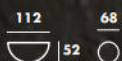
HALF ROUND "CAST IRON" Style 112mm/68mm Rainwater System BS EN 12200 - 1:2000 (Downpipes & fittings)

- Significant cost saving over traditional Cast Iron.
- Pre-fitted gutter seal retaining clip system for fast user friendly installation.
- Pre-lubricated seals.
- External fixing lugs on shoes and pipe sockets.
- Black fixing bolts available to complement traditional look.
- All the benefits of PVC, for quick and easy installation.

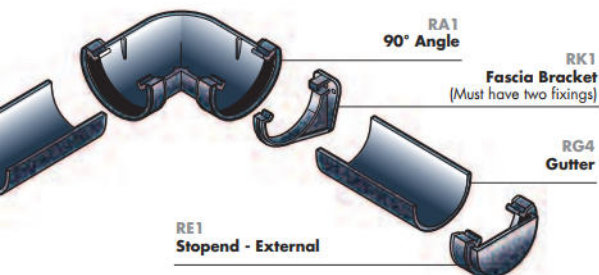
Colours



Dimensions (mm)



BS EN 607:2004 (Gutters & fittings) BS EN 1462:2004 (Eaves brackets)



Universal Rise & Fall Bracket



Top Rafter Bracket



Side Rafter Bracket



Leaf Protection Systems



DrainGuard



Spares/Ancillaries



FloSaver



Cast Iron Fixings



112mm Gutter & Fittings

Gutter - 4m/2m



90° Angle



135° Angle



Angle - any degree



FloPlast will fabricate any non-standard
angle to special order.

Stopend - External



Stopend - Internal



Fascia Bracket



Running Outlet



Stopend Outlet



Union Bracket



Gutter Adaptor



To Cast Iron Ogee R/H RD3
To Cast Iron Ogee L/H RD4



68mm Pipe & Fittings

Pipe - 2.5m



92½° Offset Bend



112½° Offset Bend



Shoe (with fixing lugs)



Requires 2 x FC50
fixings per fitting

8mm Downpipe Spacer Bracket



Only to be used with RS2, RC4 & RB4

Pipe Clip



Requires 2 x FC50
fixings per fitting

Pipe Socket (with fixing lugs)



Requires 2 x FC50
fixings per fitting

67½° Branch



Access Pipe



Gutter and pipe code reference numbers
refer to length of run: 2 metres,
2.5 metres and 4 metres.

Important when ordering:
To indicate "Cast Iron" on your
order, the following code suffix
should be used: **CI-Cast Iron**.

For more information on CAD
drawings and Guarantee Registration,
please visit www.floplast.co.uk

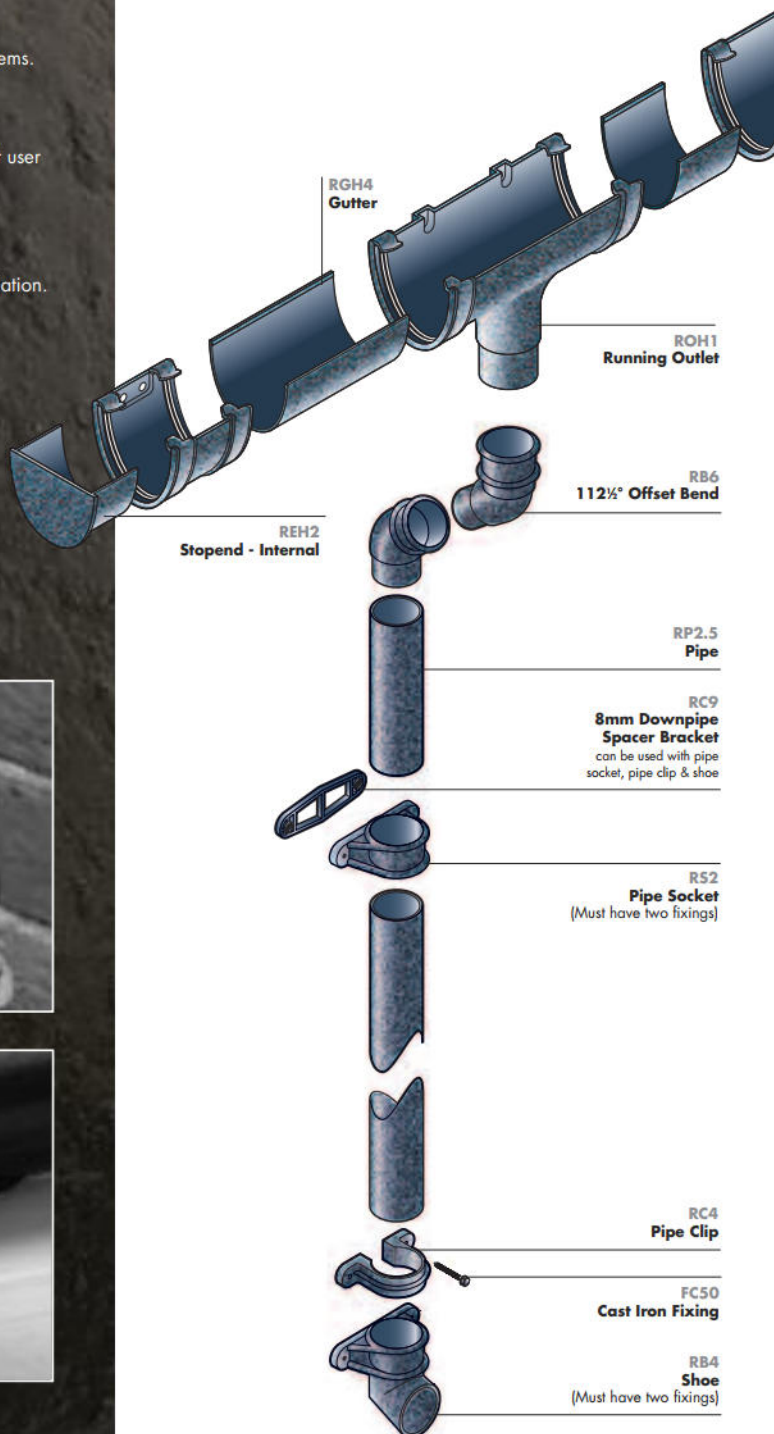
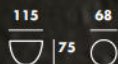
HI-CAP "CAST IRON" Style 115mm/68mm Rainwater System BS EN 12200 - 1:2000 (Downpipes & fittings)

- A semi - elliptical profile.
- High capacity - ideal for large roof areas.
- Significant saving over traditional Cast Iron systems.
- No painting required.
- Pre-fitted gutter seal retaining clip system for fast user friendly installation.
- Pre-lubricated seals.
- All the benefits of PVC for quick and easy installation.

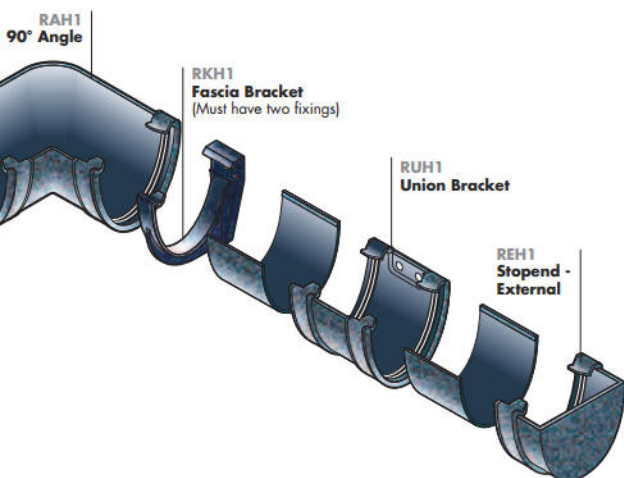
Colours



Dimensions (mm)



BS EN 607:2004 (Gutters & fittings) BS EN 1462:2004 (Eaves brackets)



Universal Rise & Fall Bracket



Top Rafter Bracket



Side Rafter Bracket



Leaf Protection Systems



DrainGuard



Spares/Ancillaries



FloSaver



Cast Iron Fixings



1/2 gauge x 50mm Stainless Steel fixings for "Cast Iron" Range (Socket Fixings)

115mm Gutter & Fittings

Gutter - 4m



90° Angle



135° Angle



Angle - any degree



FloPlast will fabricate any non-standard angle to special order.

Stopend - External



Stopend - Internal



Fascia Bracket



Running Outlet - 68mm Round



Union Bracket



68mm Pipe & Fittings

Pipe - 2.5m



92½° Offset Bend



112½° Offset Bend



Shoe (with fixing lugs)



Requires 2 x FC50 fixings per fitting

8mm Downpipe Spacer Bracket



Only to be used with RS2, RC4 & RB4

Pipe Clip



Requires 2 x FC50 fixings per fitting

Pipe Socket (with fixing lugs)



Requires 2 x FC50 fixings per fitting

67½° Branch



Access Pipe



Gutter and pipe code reference numbers refer to length of run: 2.5 metres and 4 metres.

Important when ordering:
To indicate "Cast Iron" on your order, the following code suffix should be used: **CI-Cast Iron**.

For more information on CAD drawings and Guarantee Registration, please visit www.floplast.co.uk

Niagara® OGEE "CAST IRON" Style Rainwater System BS EN 12200 - 1:2000 (Downpipes & fittings)

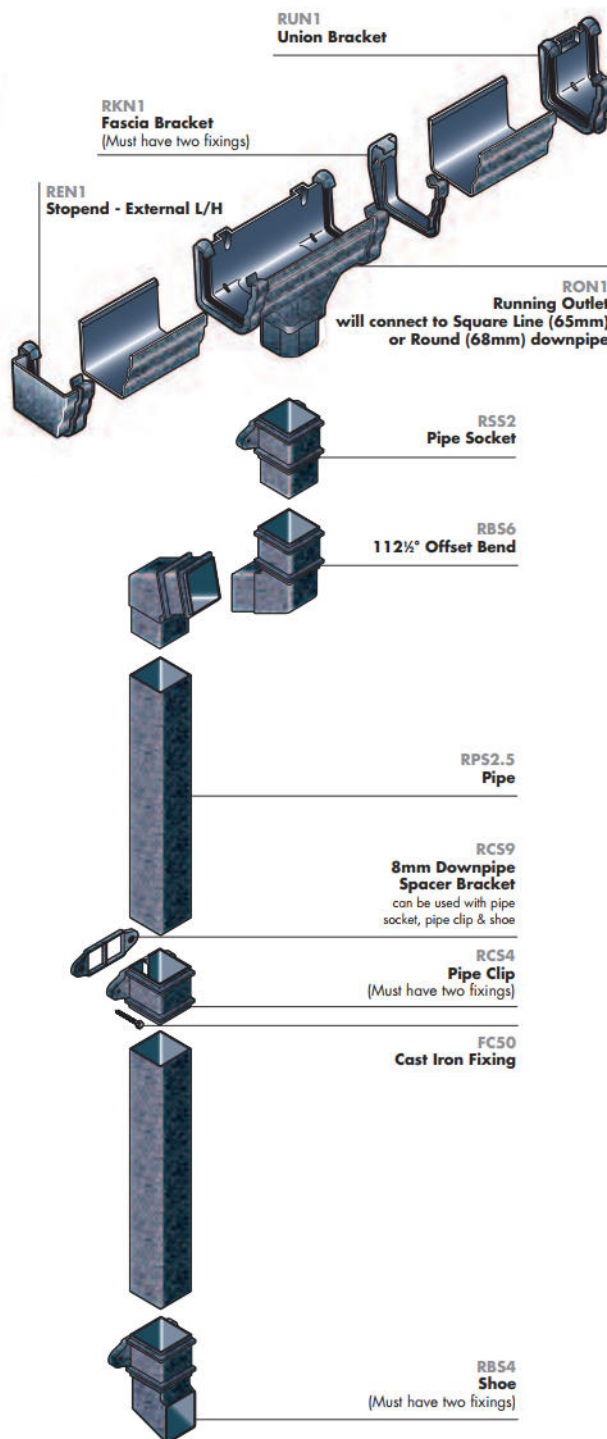
- One of the highest capacity PVC-U domestic rainwater systems on the market.
- Revolutionary designed moulded water-tight seal and retaining clip pre-fitted for fast user friendly installation.
- Extremely cost effective solution for old style building refurbishment and new build installations.
- Traditional style ogee Hopper available.
- Running Outlet can be connected to 65mm Square or 68mm Round downpipes.
- Black fixing bolts available.

Colours

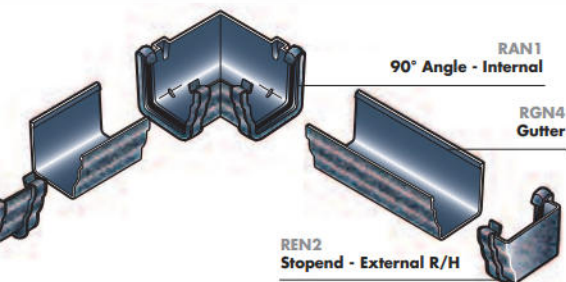


Dimensions (mm)

110	65	68
		
80		



BS EN 607:2004 (Gutters & fittings) BS EN 1462:2004 (Eaves brackets)



Universal Rise & Fall Bracket



Top Rafter Bracket



Side Rafter Bracket



Leaf Protection Systems



DrainGuard



Spares/Ancillaries



FloSaver



Cast Iron Fixings



110mm Gutter & Fittings

Gutter - 4m/2m



90° Angle - Internal



90° Angle - External



135° Angle - Internal



135° Angle - External



Angle - any degree



FloPlast will fabricate any non-standard angle to special order.

Stopped - External L/H



Stopped - External R/H



Stopped - Internal L/H



Stopped - Internal R/H



Fascia Bracket



Union Bracket



Running Outlet - 65mm Square/68mm Round



Stopped Outlet - L/H 65mm Square



Stopped Outlet - R/H 65mm Square



65mm Pipe & Fittings

Pipe - 2.5m



90° Offset Bend



112½° Offset Bend



Shoe (with fixing lugs)



Requires 2 x FC50 fixings per fitting.

Pipe Clip



Requires 2 x FC50 fixings per fitting.

8mm Downpipe Spacer Bracket



Only to be used with RSS2, RCS4 & RBS4

Pipe Socket (with fixing lugs)



Requires 2 x FC50 fixings per fitting.

67½° Branch



Please note: Round downpipe can also be used, please see page 7.

Gutter and pipe code reference numbers refer to length of run: 2 metres, 2.5 metres and 4 metres.

Important when ordering:
To indicate "Cast Iron" on your order, the following code suffix should be used: **CI-Cast Iron**.

For more information on CAD drawings and Guarantee Registration, please visit www.floplast.co.uk

“CAST IRON” Style Hoppers BS EN 12200 - 1:2000

- Traditional look.
- No painting required.
- Lightweight and resilient material.
- Corrosion free.
- Hoppers available in three different styles.
- Motifs available in 4 different styles to enhance hoppers.



Hoppers

Universal Hopper

NEW design

CODE
RH1



Connects to 65mm
Square & 68mm
Round downpipe.

Ogee Hopper

CODE
RH4



with fixing lugs
Requires 2 x FC50
fixings per fitting.

Rectangular Hopper

CODE
RH5



with fixing lugs
Requires 2 x FC50
fixings per fitting.



Motifs

Fleur-de-Lis



CODE
FL55
FL70

SIZE
55mm
70mm

Decorative Square



CODE
DS55
DS70

SIZE
55mm
70mm

Tudor Rose



CODE
TR55
TR70

SIZE
55mm
70mm

Lion's Head



CODE
LH55
LH70

SIZE
55mm
70mm

Please note: 70mm Motifs cannot be used with RH4.

Motifs are the latest addition to the FloPlast “Cast Iron” Style range. They are available in two sizes and can be applied to hoppers or running outlets using a proprietary adhesive such as Siroflex MS Polymer.

Product Features

92½ Offset Bends

- **NEW** addition to the FloPlast range.
- Available in both round and square fittings.
- Allows offset to be tighter under soffit.
- Aids installation of downpipes in awkward or restricted areas i.e around corners of buildings.
- Produces a compact installation.
- Lightweight and resilient material.



Rainwater Diverter

- Saving water.
- Saving the environment.
- Saving money.
- Easy to fit.
- Prevents excess overflow from the butt; designed to bypass the diverter and continue down the pipe.
- Fits 65mm Square and 68mm PVC-U Rainwater pipes.



Universal Hopper

- **NEW** modern design.
- Larger capacity.
- Can be enhanced with NEW "Cast Iron" Style Motifs to give that period feel.
- Corrosion free.



"CAST IRON" Style Rainwater Systems

Applications

FloPlast Rainwater Systems are suitable for all applications and types of building, including domestic, commercial and industrial.

Composition

All products are manufactured from unplasticised polyvinyl chloride (PVC-U) and comply with the material requirements of either BS EN 12200-1:2000, BS EN 607:2004 or BS EN 1462:2004 as relevant.

Rainwater gutters and pipes are manufactured by a continuous extrusion process. Fittings are produced on high-pressure injection moulding machines. All fittings are manufactured to close tolerances allowing accurate incorporation of design features.

Accreditation

All of our profiles are manufactured to BS EN 607:2004 (Gutters and fittings) BS EN 12200-1:2000 & BS EN 1329-1:2000 (Downpipes and fittings) BS EN 1462:2004 (Gutter brackets) within a quality management system assessed and registered by British Standards as meeting the requirements of BS EN ISO 9001:2000 (Certificate Number FM:501414).

Supply

Products are available from a national network of distributors and stockists. For details of your local stockist contact our Sales Office on

Specification, Technical Advice and Design Guidance

A free advisory service is available to offer technical assistance regarding product and installation details. Those involved with the building industry may take advantage of design services provided by the company for customers who have made a commitment to use or specify FloPlast products.

Installation

- 1 Plan your installation using the component diagrams to assist you in selecting the correct type and quantity of products required.
- Fascia brackets should be spaced at a maximum of one metre apart on straight gutter runs. (800mm in the case of the Niagara system).
- Angles and stopends should have a fascia bracket within 150mm of the fitting.

- A supporting pipe clip should be used on shoes, branches and bends where necessary.
 - Support downpipes below offset and at maximum intervals of 1.8 metres.
- 2 Where necessary remove the old gutter and replace old fascia board with FloPlast low maintenance PVC-UE co-extruded fascia board.
 - 3 Establish the position of the running outlet, usually over an existing drain, and fix securely to fascia board.
 - 4 Fix a fascia bracket 100mm short of furthest point from the outlet. Allow for a fall to the outlet (1:350 is recommended) using a string line.
 - 5 Fixings:
 - Fix fascia and union brackets at required intervals.
 - Fascia brackets should be positioned so as to avoid the fixing screws splitting the top edge of any timber fascia board. All brackets should be secured to the fascia board with two 25mm x 5mm (1" x 10) screws.
 - Unions should be fixed using two 25mm x 5mm (1" x 10) screws.
 - Outlets and angles should be fixed using two 25mm x 5mm (1" x 10) screws where possible.
 - Rainwater downpipe clips, sockets, shoes and hoppers should be fixed using two x FC50 fixings. The FC50 is a 12 gauge x 50mm Stainless Steel bolt, that requires 12mm, 12 point star head socket to tighten it. When using these fixings to attach the Ogee and Rectangular Hopper we advise that a 3/4" tap washer is used. It is attached to concrete, brick, block etc in the same way as any other screw by using a plug type fixing, and into timber by pilot drilling a starter hole first.
 - 6 Lubricate all gutter seals with FloPlast silicone spray lubricant to ensure an easy fit and to allow for movement caused by expansion and contraction.
 - 7 Working from the running outlet insert the back edge of the gutter under the retaining lip of the wrap around clip. Using slight downward pressure on the gutter, snap the front edge of the retaining clip over the front of the gutter. (Ensure that the marked expansion allowance is kept.)

- 8 Use a union bracket or angle to join to next gutter length in order to build up a gutter run. Use a stopend to complete the run.
- 9 Downpipe installation starts at the outlet. If an offset is required use two offset bends with or without a short piece of pipe, alternatively use an adjustable offset bend. Ensure a 6mm gap is left at the top of the downpipe for expansion.

Pipe connectors if required should be secured to the wall with a pipe clip.

At the base of the pipe, fit a shoe or connect downpipe to underground drainage system using a 110mm x 68mm reducer (SP96 or D96).

Capacity of Drainage

To select the gutter size appropriate to your requirements, two factors must be taken into consideration.

- Roof Area
- Gutter Flow Capacity

Snow loading statement: In areas of high snow risk, FloPlast recommend using Snow Guard; this will assist in the slow release of melting snow into gutters and prevent snow slippage which is particularly prevalent where slate tiles are installed.



Carrying Capacities for Gutter

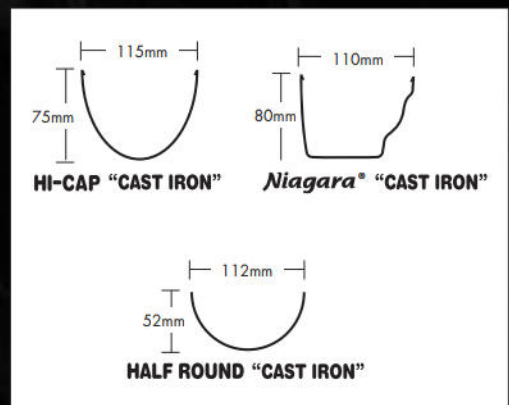
The carrying capacity of gutters varies under differing conditions. The main variables are whether or not the gutter is fitted to a fall and whether the outlet is placed in the centre or at one end of the gutter run.

Gutter flow rates will vary according to the type and configuration of downpipe system being used, however downpipe sizing is not a normal design consideration, as the downpipe systems manufactured by FloPlast have flow capacities approximately ten times greater than the gutter systems they drain.

The carrying capacities in litres per second for gutters, taking into account the major variables, are specified in the performance table on page 26 of our PVC-U Rainwater Systems brochure.

Design Data

All gutter dimensions are nominal.



Pipe Dimensions	Normal Size	Actual OD
Circular	68mm (2½")	68.48mm
Square	65mm (2½")	65mm

For more information on design factors, expansion tests, roof area calculating and flow rates, please see our current PVC-U Rainwater Systems brochure or visit our website at www.floplast.co.uk

"CAST IRON" Style Ring Seal Soil System PVC-U BS EN 1329 - 1:2000, BS 4514:2001

- All sockets come complete with a "Cast Iron" Style socket shroud.
- "Cast Iron" Style PVC-U System manufactured to BS EN 1329 - 1:2000, BS 4514:2001.
- Traditional 1.8 metre length plain ended pipe.
- Pipe clips also replicate the authentic cast iron style.
- Strap on boss.
- Complements FloPlast's extremely successful Half Round, Hi-Cap and Niagara "Cast Iron" Style Rainwater Systems.



110mm Pipe & Fittings

Pipe-Plain Ended



Pipe Coupling



Brackets

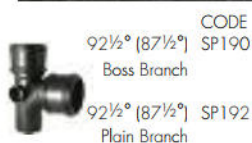


Soil Pipe Bends*



*All complete with socket shroud.

Soil Pipe Branches*



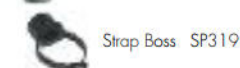
*All complete with socket shroud.

Access Fittings*



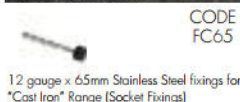
*All complete with socket shroud.

Boss Pipe Fittings

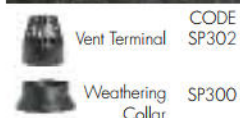


Solvent Cement can be used, with caution, alternatively use external silicone sealant.

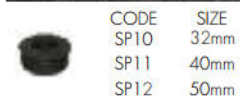
Cast Iron Fixings



Terminal Fittings



Waste Adaptor - Rubber (Push-Fit)



Lubricants



Flexible Coupling



This product will connect to traditional cast iron pipe.



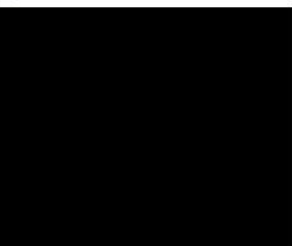


Fixing Guide

Install and test system in accordance with BS EN 1610:1998.

- Commence the stack from the base and work up. Mark the position of brackets and drill and fix screws before erecting the stack.
- Fix pipe or socket brackets at maximum 1.8m centres vertical and at maximum 1m centres horizontal.
- An allowance for expansion should be made by withdrawing all pipe and fitting spigots from sockets by 10mm.
- The Double Socket Coupling (SP115) and Pipe Clip (SP84) should be fixed using 2 x FC65 fixings. The FC65 is a 12 gauge x 65mm Stainless Steel bolt, that requires 12mm, 12 point star head socket to tighten it.
- The use of silicone lubricant on all seals will facilitate jointing.
- The system should incorporate suitable access points to enable testing and maintenance of the system.

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KM 501316



KM 512474



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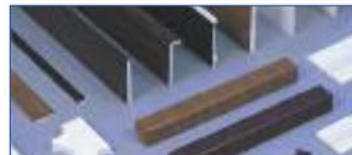
KM 548614



www.floplast.co.uk



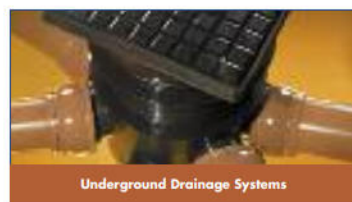
Other systems available



PVC-UE Roofline, Window & Cladding Systems



PVC-U Rainwater Systems



Underground Drainage Systems



Soil & Waste Systems



'Alprene' Compression Fittings for MDPE



FluFit Push-fit Hot & Cold Plumbing Systems

01/03/11