



ALUMINIUM RAINWATER SYSTEMS

## Technical Specification Manual





# Table of Contents

Introduction.....	4	Double Branches.....	43
Architects' Information.....	5	One-Part Offsets.....	45
Environmental Information.....	6	Two-Part Offsets.....	46
Powder Coating Colours.....	7	Brackets.....	47
Powder Coating Process.....	9	Loose Collars.....	48
Powder Coating Accreditations.....	10	Hopper Heads.....	49
Stormguard Wall Coping – Wind Testing.....	11	Square & Rectangular Security Pipe.....	51
Structural Calculations.....	12	Lengths.....	51
Rainwater.....	13	92.5° Bends.....	52
Rainwater Pipes.....	14	112.5° Bends.....	52
Technical Specifications.....	15	135° & Non-Standard Bends.....	53
Circular Rainwater Pipe.....	17	Shoes.....	53
Lengths.....	17	Rodding Access Pipes.....	54
Bends.....	18	Y Junctions.....	54
Shoes.....	19	Double Branches.....	55
Rodding Access Pipes.....	19	One-Part Offsets.....	57
Y Junctions.....	20	Plinth Offsets.....	57
Double Branches.....	22	Two-Part Offsets.....	58
One-Part Offsets.....	23	Hopper Heads.....	59
Two-Part Offsets.....	24	Rainwater Gutters.....	60
Brackets.....	24	Technical Specifications.....	61
Loose Collars.....	25	Beaded Half Round Gutter.....	64
Hopper Heads.....	26	Lengths.....	64
Circular Security Pipe.....	27	90° Corners.....	65
Lengths.....	27	135° & Non-Standard Corners.....	65
Bends.....	28	Outlets.....	66
Shoes.....	29	Stop Ends.....	66
Rodding Access Pipes.....	29	Jointing Clips.....	67
Y Junctions.....	30	Fascia Brackets.....	67
Double Branches.....	30	Double-Strength Fascia Brackets.....	68
Double Branches (continued).....	31	King Brackets (with Tudor Rose).....	68
One-Part Offsets.....	31	Top-Fix Rafter Brackets.....	69
Plinth Offsets.....	32	Side-Fix Rafter Brackets.....	69
Two-Part Offsets.....	32	Rise & Fall Brackets.....	70
Hopper Heads.....	33	Eclipse Box Gutter.....	71
Square & Rectangular Rainwater Pipe.....	34	Lengths.....	71
Lengths.....	34	90° Corners.....	72
92.5° Bends.....	35	135° & Non-Standard Corners.....	73
112.5° Bends.....	37	Outlets.....	74
135° & Non-Standard Bends.....	38	Outlets.....	75
Shoes.....	39	Jointing Clips.....	77
Rodding Access Pipes.....	40	Fascia Brackets.....	77
Y Junctions.....	41	Top-Fix Rafter Brackets.....	78
		Side-Fix Rafter Brackets.....	79



# Table of Contents

Rise & Fall Brackets .....	79	Lengths.....	92
Raked Box Gutter .....	80	Corners .....	93
Radius Box Gutter .....	80	Apex & Nadir Angles.....	94
Moulded Ogee Gutter .....	81	T-Junctions & Straight Change-of-Size Profiles .....	95
Lengths.....	81	Stormfix Brackets, Stop Ends & Upstands...	96
90° Corners .....	82	Radius Coping .....	97
135° Corners .....	83	Eclipse Fascia Systems .....	98
Non-Standard Corners .....	83	Technical Specifications .....	99
Outlets .....	84	Eclipse Fascia Systems .....	101
Stop Ends.....	85	Lengths.....	101
Jointing Clips.....	85	Corners .....	102
Fascia Brackets.....	86	Apex Angles.....	103
Top-Fix Rafter Brackets .....	86	Box Ends .....	104
Side-Fix Rafter Brackets.....	87	Jointing Clips.....	104
Rise & Fall Brackets .....	87	Eclipse Soffit Systems .....	105
Architectural Aluminium .....	88	Technical Specifications .....	106
Stormguard Wall Coping Systems .....	89	Extruded Soffit System .....	108
Technical Specifications .....	90	Folded Soffit System.....	110
Stormguard Coping Systems .....	92		







ALUMINIUM RAINWATER SYSTEMS



## Introduction

*Stormguard Aluminium Rainwater Systems* provides high-quality, durable solutions for effective rainwater management. Our comprehensive range of aluminium guttering, downpipes, fascia, soffit, coping and architectural products combines superior performance with elegant design, making them suitable for both commercial and residential applications.

With over three decades of expertise in the rainwater industry, *Stormguard* has developed a reputation for excellence, offering products that are not only aesthetically pleasing but also engineered to withstand the harshest weather conditions. Our aluminium systems require minimal maintenance, are 100% recyclable and provide a long-lasting alternative to traditional materials such as cast iron, PVC or timber.

This technical specification manual has been designed to provide architects, specifiers, builders and installers with detailed information on our complete product range. Each section outlines the technical specifications, installation requirements and maintenance guidelines for our various systems, ensuring that you have all the information needed to specify and install our products correctly.

From traditional half-round gutters to contemporary box sections, decorative hoppers to sleek downpipes, our range offers solutions for every architectural style and building type. All products are available in mill finish or can be powder coated in any RAL colour to complement your project's design scheme.

*Stormguard's* commitment to quality is reflected in our adherence to the highest industry standards, with all products manufactured in accordance with relevant British and European regulations. Our technical team is available to provide expert advice on product selection, system design and installation techniques, ensuring that your rainwater management system performs optimally for years to come.

We trust that this manual will serve as a valuable resource for your project. Should you require any additional information or assistance, please do not hesitate to contact our technical support team.



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# Architects' Information



## Aluminium Standards

*Stormguard Aluminium Rainwater Systems* products meet the highest standards in the UK and European markets for its extruded, sheet and cast aluminium products. Aluminium rainwater profiles are extruded from **aluminium alloy 6063 T4 T5 T6** to **BS EN ISO 7759-2010**.

Aluminium sheet is manufactured from **aluminium alloy SIC H4** to **BS 485-1:2008**. The pressed components are produced from aluminium sheet manufactured from **SIC H4** to **BS 485-1:2008**. Aluminium castings are produced from aluminium alloy to **BS EN 1706:2010**.

## Conservation & Specification

Many of the UK's conservation areas are decidedly stringent on the type of products that they allow to be used on heritage and protected buildings. *Stormguard's* full range of aluminium rainwater goods are used and specified extensively throughout the UK and Ireland on numerous

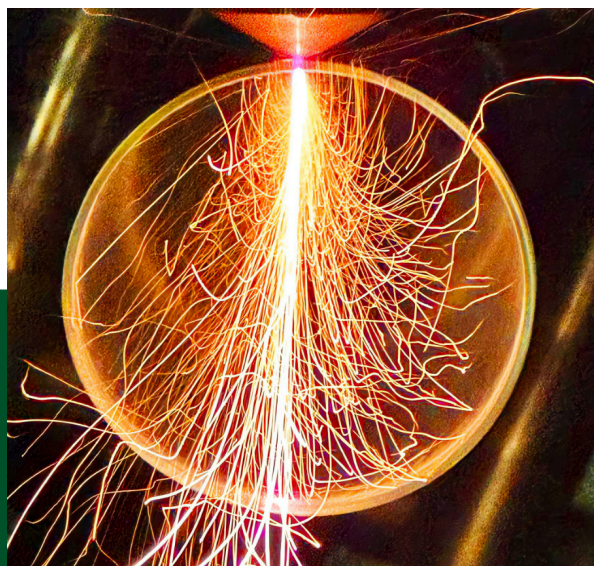
listed buildings within heritage and conservation areas due to the high quality and suitability of the products.

Numerous architects, councils, surveyors and institutions both in the private and public sectors also specify *Stormguard Aluminium Rainwater Systems* comprehensively throughout the UK and Ireland for their full range of architectural aluminium and rainwater products.

## Guttering Installation & Maintenance

The time taken to fit gutters and the cost of maintaining them are increasingly becoming more demanding, as projects require lower prices with minimal maintenance requirements to reduce costs. Aluminium guttering by nature meets the modern requirements, as its installation is very simple and cost effective due to its low weight and high strength.

The clear benefits from this is the minimal time required to fit the products – making it commercially economic, and the minimal weight on roofline fascias and soffits, causing less stress on the building – therefore reducing the overall maintenance requirements and costs in the long term.



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# Environmental Information

## Recycling

Over half of the UK's regulated waste comes from construction. Some of this is generated at the fabrication stage, some on site during building, and a good proportion during demolition. The UK government is keen to reduce waste throughout industry in general, and to reduce or abolish the use of toxic or environmentally damaging materials and potentially hazardous waste. Because aluminium is 100% recyclable and non-toxic, the metal has a valuable part to play in improving the environmental performance of the construction industry.

## Whole-Life Costing

Increasingly, the costing of a project demands that costs be considered for the whole life of a building. Aluminium's physical properties mean that, once installed, it will last longer and require less maintenance than steel, timber or plastic alternatives, resulting in genuine whole-life cost savings.

## Carbon Footprint

As a direct result of aluminium's non-toxic, long-lasting and recyclable attributes, it has a positive effect on an individual or commercial carbon footprint, making it a sustainable choice for modern construction.

## Safety

Aluminium is non-toxic, safe to handle and there are no health problems related to its use. Aluminium's natural oxide does not affect the acidity of water falling upon it. Therefore, water run-off from aluminium roofs and coping is a non-toxic substance that will not harm animal or plant life. The process used in Stormguard's powder coating is not solvent-based, and the final run-off has been fully tested and approved as clean.

## Sustainability

Aluminium is one of the world's most abundant elements, it is almost infinitely recyclable and rightly considered amongst the most sustainable of the world's resources. Extraction is carried out in an environmentally considerate manner with old mining sites being restored. Smelting is generally carried out using renewable hydroelectric power. The amount of embodied CO2 is low compared to other construction materials and, unlike many other materials where the energy used to create the material is lost, the energy used to smelt aluminium is effectively invested and 95% of it will be reused when recycling.

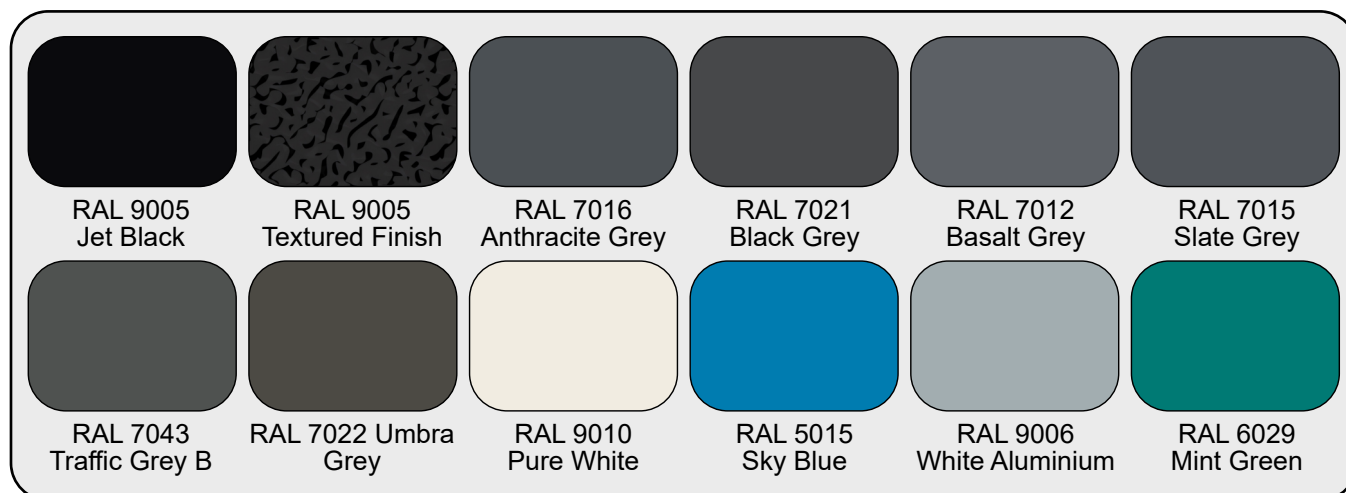




# Powder Coating Colours

Stormguard offers an extensive range of powder coating options to complement any architectural vision, ensuring that our high-quality aluminium products can be customised to meet your specific aesthetic requirements while maintaining their exceptional durability and performance.

All Stormguard aluminium products can be powder coated in any RAL colour, providing unlimited design possibilities for your project. Our standard colour range includes popular architectural shades such as **Jet Black (RAL 9005)**, **Anthracite Grey (RAL 7016)** and **Pure White (RAL 9010)**, among many others.



## Finish Options

Each RAL colour is available in four distinct finishes, allowing for further customisation:

- **Matt Finish:** A low-sheen, non-reflective surface that provides a subtle, contemporary appearance.
- **Satin Finish:** A middle-ground option offering a slight sheen with minimal reflection.
- **Gloss Finish:** A high-shine, reflective surface that creates a bold, striking aesthetic.
- **Textured Finish:** A tactile, 'cast-a-like' surface that provides added dimension and helps conceal minor surface imperfections.





# Powder Coating Colours

## Special Considerations

While our standard pricing includes many RAL colours in standard finishes, please note that certain speciality colours and finishes may incur an additional surcharge. These include metallic finishes, pearlescent effects, and certain vibrant or rare colours that require specific processing techniques.

All powder coatings are applied using a three-phase process (see **Powder Coating Process**) to ensure optimal adhesion and longevity, regardless of the colour or finish selected.

For colour charts, swatches, or to discuss specific colour matching requirements for your project, please contact our technical team who will be happy to provide guidance on the most suitable options for your application.





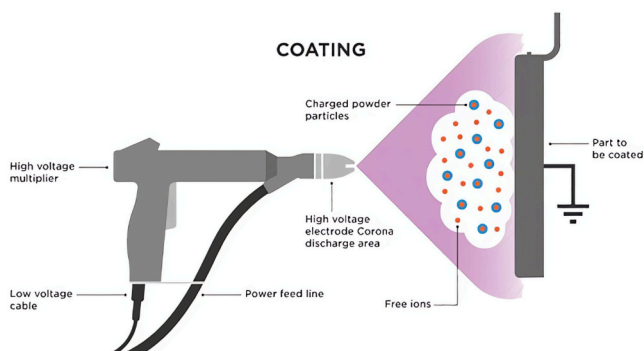
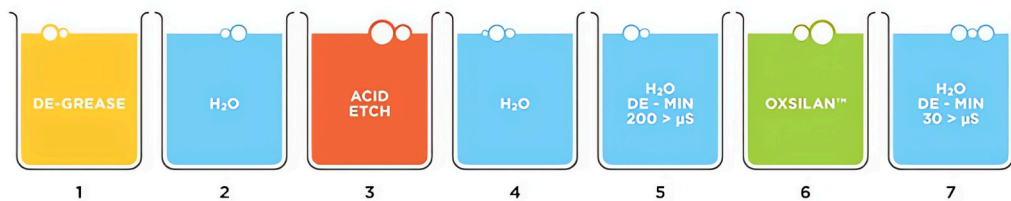
# Powder Coating Process

There are three key phases to the powder coating process:

## Phase One: Pre-treatment

This stage is vital in allowing the paint finish to perform to its full potential. All paints are porous and will over time allow atmospheric conditions to permeate through the coating onto the metal. To safeguard against this, all substrates are chemically pre-treated in order to protect against corrosion and promote good adhesion.

### PRE-TREATMENT STAGE



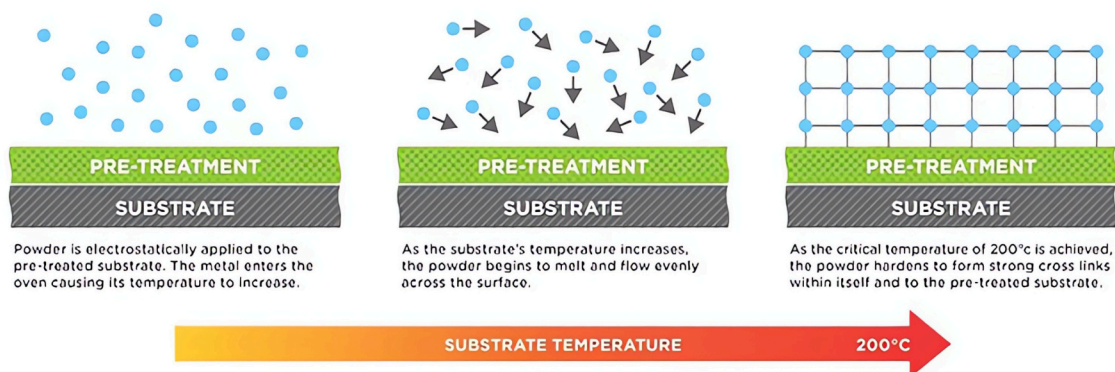
## Phase Two: Coating

After pre-treatment the metal is suspended on a conveyerised production line and passes into the spray booth for coating. The powder, held in a fluidised hopper bed, is carried to the spray gun using compressed air. As the powder passes out of the gun, the particles are charged and therefore attracted to the earthed piece of metal. This creates an even coating as it wraps around the work piece.

## Phase Three: Curing

After coating, the production line moves the work into the tunnel oven where it is baked. Once the curing is complete the substrate is inspected for defects, paint thickness, colour and gloss level. Provided there are no issues, the product is packed and made ready for despatch.

### CURING STAGE





# Powder Coating Accreditations

## Certified Quality Control

*Stormguard's* powder coated products are manufactured by specialist coating partners who maintain the highest industry standards and certifications. All powder coating suppliers utilised by *Stormguard* hold ISO 9001:2015 quality management system certification, ensuring systematic approaches to all internal processes from purchasing through to order processing, maintenance monitoring and customer satisfaction. This rigorous quality framework guarantees consistent excellence across every stage of the powder coating process, from initial material selection through to final inspection and dispatch.

## Tested Performance Standards

Our coating partners adhere to comprehensive British and European standards for architectural powder coating applications. Products meet **BS EN 12206-1:2004** specifications for coating of aluminium and aluminium alloys for architectural purposes, alongside compliance with **BS 6496:1984** for powder organic coatings. For galvanized steel applications, standards **BS 6497:1984** and **BS EN 13438:2005** are met. Additional technical standards include **ISO 2409:2020** for paint adhesion testing, **ISO 1519:2011** for coating flexibility, **ISO 9227:2022** for salt spray corrosion resistance testing, and **ASTM D2794-93(2019)** for impact resistance testing. These stringent testing protocols ensure that every powder coated product delivers exceptional performance characteristics including superior weather resistance, outstanding colour retention, and long-term durability in even the most challenging environmental conditions.

## Enhanced Protection Accreditations

All coating partners maintain approved applicator status from major powder manufacturers and hold **Qualicoat** certification, with enhanced **Qualicoat Seaside** accreditation available for projects in coastal or marine environments where additional corrosion protection is required. Some partners also offer **GSB** approval (German quality assurance certification), **ALFED** membership and **carbon neutral** certification. Regular independent audits verify ongoing compliance with these demanding standards, providing assurance that *Stormguard* products consistently meet or exceed industry benchmarks for quality and performance. When specifying *Stormguard* powder coated products, customers can request specific accreditations or standards relevant to their project requirements, with full supporting documentation available upon request.





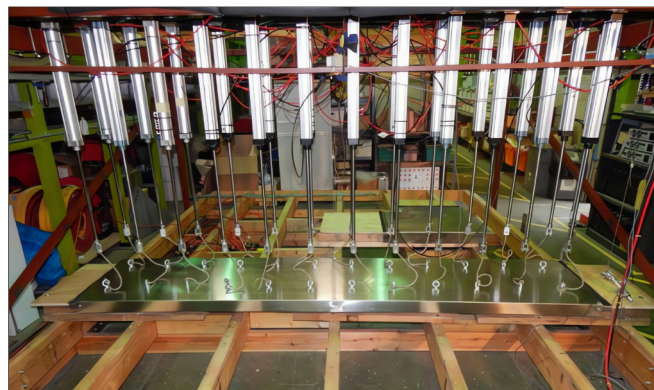
# Stormguard Wall Coping – Wind Testing

Independent testing, carried out by BRE, as part of Stormguard's ongoing product development, ensures both architects and installers can specify and fit our wall coping systems with complete confidence.

With no current British or European standard in place relating to the wind uplift testing of wall coping systems, BRE and Stormguard developed a realistic test system to simulate the effects of repeated wind-loading on the Stormguard wall coping system.

The Stormguard Coping System is engineered to shield parapet walls from weather damage. It uses a mechanical fixing system with 2.9mm thick folded aluminium brackets secured to the wall top with eight 50mm x 6.5mm Ejot stainless steel self-drilling screws (four per side). The coping attaches to the bracket via 30mm x 5.5mm Ejot stainless steel self-drilling screws through its side.

The system includes a 3000mm straight section with three identical brackets at 1500mm intervals and a corner section with two brackets on each end and a third at the outer corner.



CWT1 — Wind Testing Apparatus

## Testing and Performance

The system has undergone rigorous testing to assess its resistance to wind uplift, static loading, and abseiling stresses.

### Wind Uplift Resistance

Tests were conducted on straight and corner sections, simulating various real-world conditions. The straight lengths achieved wind speeds in excess of 250 mph, with the corner sections achieving in excess of 383mph. [Note that these figures are for reference only and do not include safety factors or wind pressure coefficients.

COPING CONFIGURATION	WIND SPEED ACHIEVED
Straight Lengths	In excess of 250 mph
Corner Sections	In excess of 383 mph

TEST TYPE	LOAD CAPACITY
Static Point Load	Up to 150 kg
Abseil Line Load	200kg

### Static Load Resistance

A 1520mm straight section withstood a static point load of up to 150kg, simulating a person standing on the coping.

Abseil Load Resistance: The same section also withstood a line load of 200kg, simulating abseiling stresses.

### Additional Testing

Further tests were conducted with increased loads. The abseil line load was raised to 200kg with no damage.

## Conclusion

The Stormguard Aluminium Coping System demonstrates robust resistance to wind uplift, static loads, and abseiling forces, making it a reliable choice for parapet wall protection.

## Testing Summary

- Independent testing conducted by BRE (Building Research Establishment)
- System uses 2.9mm thick folded aluminium brackets
- Brackets secured with eight 50mm x 6.5mm Ejot stainless steel self-drilling screws
- Testing involved 3000mm straight sections with brackets at 1500mm intervals
- Corner sections tested with brackets on each end and at outer corner

*Note: The wind speed figures are for reference only and do not include safety factors or wind pressure coefficients.*



# Structural Calculations

Stormguard offers a comprehensive Structural Calculations service to provide complete assurance for your aluminium rainwater and architectural installations. This additional service delivers detailed structural analysis tailored specifically to your project's location and requirements, ensuring optimal performance and longevity even in the most challenging environmental conditions.

## Service Overview

Our Structural Calculations service provides a thorough assessment of how our systems will perform when installed at your specific site. Conducted by qualified structural engineers, this analysis considers all relevant environmental factors that could impact installation integrity, including:

- **Wind Loading:** Detailed calculations based on geographical location, building height, topography and local wind patterns.
- **Snow Loading:** Analysis of potential snow accumulation and its impact on guttering.
- **Fixing Point Assessment:** Verification of proposed fixing locations, centres and bracket spacing for optimal load distribution.
- **Material Compatibility:** Analysis of substrate materials and their compatibility with our fixing systems.

## Benefits of Structural Calculations

- **Peace of Mind:** Documented verification that your installation will withstand location-specific environmental challenges.
- **Regulatory Compliance:** Supporting documentation for building control submissions and planning requirements.
- **Risk Mitigation:** Identification and resolution of potential structural issues before installation begins.
- **Optimised Installation:** Precisely determined fixing centres and bracket positioning for maximum system efficiency.

- **Installation Guidance:** Detailed specifications for installers to ensure proper implementation.

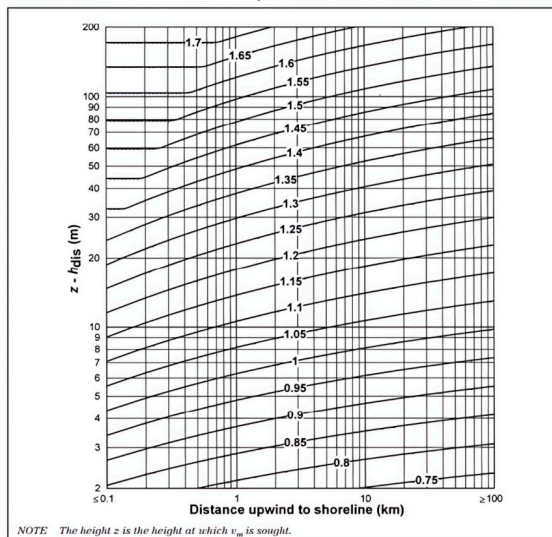
## Process

The Structural Calculations service involves a systematic approach:

1. **Data Collection:** We gather specific information about your project location, building dimensions and system requirements.
2. **Site-Specific Analysis:** Our engineers analyse local environmental factors, including historical weather data and geographic considerations.
3. **System Modelling:** Advanced software is used to model the performance of our products under calculated stress conditions.
4. **Comprehensive Report:** You receive a detailed report including all calculations, recommendations and installation specifications.

To arrange Structural Calculations for your project, contact our Technical Services Department who will guide you through the process and provide a quotation for this value-added service.

Figure NA.3 Values of  $c_e(z)$



### Pressures and forces

Net pressure:

$$p = c_{pe} \cdot q_p - c_{pi} \cdot q_{pi}$$

Net force:

$$F_w = p_w \cdot A_{ref}$$

#### Roof load case 1 - Wind 0, $c_{pe}$ 0.20, $c_{pi}$

Zone	Ext. pressure coeff. $c_{pe}$	Peak velocity pressure $q_p$ (kN/m <sup>2</sup> )	Net pressure element, $p_i$ (kN/m <sup>2</sup> )	Net pressure structure, $p_s$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force element $F_{we}$ (kN)	Net force structure $F_{ws}$ (kN)
F (+ve)	-1.90	0.86	-1.82	-1.62	45.00	-81.73	-72.98
G (+ve)	-1.30	0.86	-1.30	-1.16	105.00	-136.22	-122.25
H (+ve)	-0.70	0.86	-0.78	-0.71	600.00	-467.05	-424.07
I (+ve)	-0.20	0.86	-0.35	-0.33	160.00	-55.35	-52.08
Total vertical net force:						$F_{wv} = -671.39$ kN	
Total horizontal net force:						$F_{wh} = 0.00$ kN	

#### Roof load case 2 - Wind 0, $c_{pe}$ -0.3, $c_{pi}$

Zone	Ext. pressure coeff. $c_{pe}$	Peak velocity pressure $q_p$ (kN/m <sup>2</sup> )	Net pressure element, $p_i$ (kN/m <sup>2</sup> )	Net pressure structure, $p_s$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force element $F_{we}$ (kN)	Net force structure $F_{ws}$ (kN)
F (+ve)	-1.90	0.86	-1.38	-1.19	45.00	-62.27	-53.52
G (+ve)	-1.30	0.86	-0.86	-0.73	105.00	-90.81	-76.85
H (+ve)	-0.70	0.86	-0.35	-0.27	600.00	-207.58	-164.60
I (+ve)	0.20	0.86	0.43	0.41	160.00	69.19	65.92
Total vertical net force:						$F_{wv} = -229.05$ kN	
Total horizontal net force:						$F_{wh} = 0.00$ kN	

#### Roof load case 3 - Wind 90, $c_{pe}$ 0.20, $c_{pi}$

Zone	Ext. pressure coeff. $c_{pe}$	Peak velocity pressure $q_p$ (kN/m <sup>2</sup> )	Net pressure element, $p_i$ (kN/m <sup>2</sup> )	Net pressure structure, $p_s$ (kN/m <sup>2</sup> )	Area $A_{ref}$ (m <sup>2</sup> )	Net force element $F_{we}$ (kN)	Net force structure $F_{ws}$ (kN)
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## Rainwater



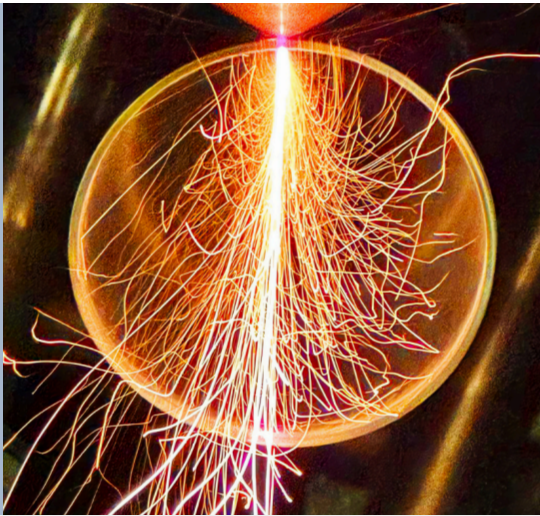


## Rainwater Pipes

Stormguard's aluminium rainwater pipes provide a seamless blend of form and function, ensuring efficient water drainage while complementing your home's architecture. Crafted from premium-grade aluminium, our pipes offer a durable and long-lasting solution for managing rainwater run-off.

# Stormguard Rainwater Pipes

## Technical Specifications



### MATERIAL & CONSTRUCTION

#### Material

Manufactured from 6063 T4 or T6 extruded aluminium tube with minimum 1.6mm wall gauge for exceptional strength and durability.

#### Profile Options

Available in circular (63mm, 76mm, 102mm, 150mm diameters) and square/rectangular (76x76mm, 102x76mm, 102x102mm, 150x150mm) configurations.

#### Standard Lengths

Up to 3 metres in half-metre increments.

#### Finish

Polyester powder coated to BS 6496:1984 and BS EN 12206-1:2004 for enhanced durability and longevity.



### SYSTEM FEATURES

#### High-Grade Aluminium Construction

Ensures exceptional strength, durability, and resistance to corrosion. The high-grade alloy composition provides superior resistance to thermal expansion and contraction, preventing stress-related failures.

#### Versatile Design Options

Choose from decorative die-cast aluminium collars (with or without traditional lugs), fabricated collars or swaged sockets with loose brackets for customised appearance.

#### Security Solutions

Anti-vandal pipes available in six standard profiles; circular (76mm and 102mm) and square/rectangular (75x75mm, 100x75mm, 100x100mm and 150x150mm) with flush-fitting design and concealed joints. Particularly suited to schools, commercial premises and public buildings where security is paramount.

#### Comprehensive Fitting Range

Complete selection of bends, offsets, shoes and junction pieces for any configuration, providing flexibility for various installation requirements.

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ALUMINIUM RAINWATER SYSTEMS

## PRODUCT INFORMATION

**PRODUCT NAME**  
RAINWATER PIPE

**PRODUCT CODE PREFIX**  
PR / PS / SPR / SPS

**PRODUCT CATEGORY**  
RAINWATER



## MAINTENANCE

### Regular Inspection

Conduct comprehensive visual and physical inspections of the entire rainwater system to check for blockages, leaks or damage periodically, with particular attention to areas where debris commonly accumulates and where weather exposure may have caused deterioration over time.

### Cleaning

Systematically remove all debris that may have accumulated in pipes, gutters, outlets, or hoppers, paying special attention to areas where water flow may be restricted and where blockages could cause overflow or back-up conditions.

### Touch-Ups

Address any surface damage promptly using appropriate touch-up paint to maintain the protective finish and prevent the onset of corrosion that could lead to more extensive and costly repairs.

### Joint Inspection

Carefully examine and verify all connections remain secure and watertight, checking for any signs of movement, separation or deterioration of silicone sealants that could compromise the system's integrity.

## ADDITIONAL CONSIDERATIONS

### Compatibility

Avoid direct contact with dissimilar metals or materials containing lime or cement. Use suitable barrier tape to prevent electrolytic corrosion.

### Security Applications

Consider implementing anti-vandal rainwater pipe options specifically designed for properties located in high-risk areas where climbing deterrence and tamper resistance are essential security considerations.

### Custom Solutions

Explore comprehensive bespoke pipe system design and manufacturing services that are specifically available for unique project requirements where standard profiles, dimensions or configurations cannot adequately meet the architectural, structural or functional demands of specialised building applications.



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# TECHNICAL DATA SHEET



## CIRCULAR RAINWATER PIPE

All rainwater pipes are made from heavy-grade extruded aluminium tube with a minimum 1.6mm wall gauge for exceptional strength and durability.

Premium extruded aluminium downpipes available in circular profiles — 63mm, 76mm, 102mm and 150mm diameters (Ø) — have either decorative diecast aluminium collars with or without traditional lugs or swaged aluminium collars with extruded pipe brackets.

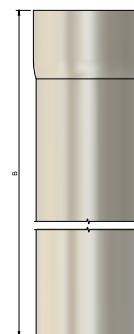
150mm diameter pipes have feature made collars and fixing brackets to suit standard pipe lengths.



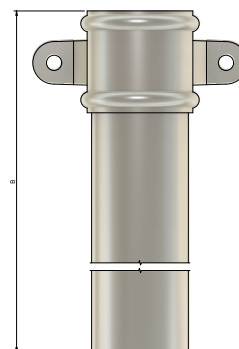
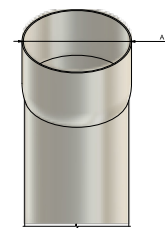
## Lengths

PIPE SIZE	COLLAR TYPE	COLLAR DIAMETER (A)	DIM C	CODE PREFIX / SUFFIX
63Ø	Swaged	68		PR63 / S
63Ø	Cast eared collar	73	149	PR63 / CEC
63Ø	Cast non-eared collar	73		PR63 / CC
76Ø	Swaged	81		PR76 / S
76Ø	Cast eared collar	83	159	PR76 / CEC
76Ø	Cast non-eared collar	83		PR76 / CC
102Ø	Swaged	108		PR102 / S
102Ø	Cast eared collar	108	184	PR102 / CEC
102Ø	Cast non-eared collar	108		PR102 / CC
152Ø	Fabricated	158		PR152 / S
152Ø	Cast eared collar	?	?	PR152 / CEC
152Ø	Cast non-eared collar	?		PR152 / CC

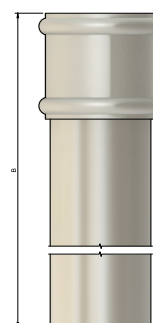
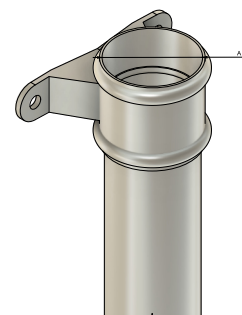
PIPE LENGTH (B)	LENGTH CODE
3000 / 3045 (CC)	01
2500 / 2545 (CC)	02
2000 / 2045 (CC)	03
1500 / 1545 (CC)	03A
1000 / 1045 (CC)	04
500 / 545 (CC)	05



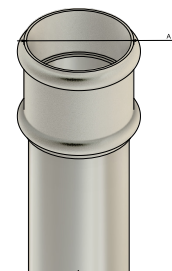
PRL1 — Length of swaged collar round pipe



PRL2 — Length of cast eared collar round pipe



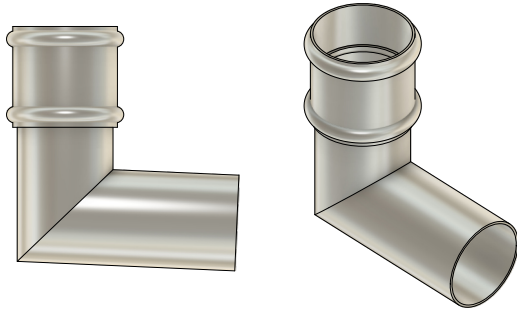
PRL3 — Length of cast non-eared collar round pipe



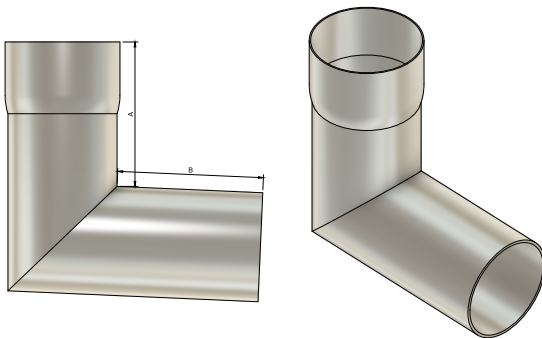


# Circular Rainwater Pipe

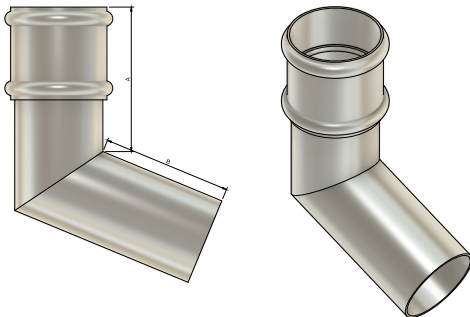
## Bends



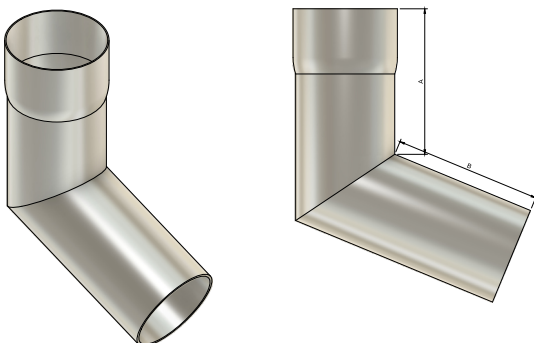
PRB1 — Cast non-eared collar round 92.5° rainwater pipe bend



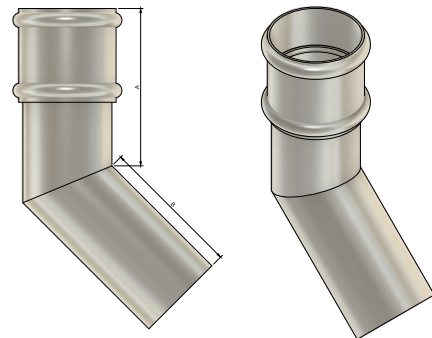
PRB2 — Swaged collar round 92.5° rainwater pipe bend



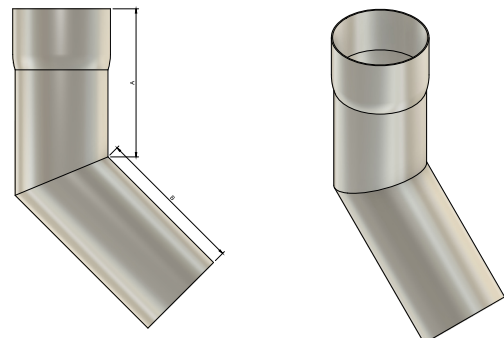
PRB3 — Cast non-eared collar round 112.5° rainwater pipe bend



PRB4 — Swaged collar round 112.5° rainwater pipe bend



PRB5 — Cast non-eared collar round 135° rainwater pipe bend



PRB6 — Swaged collar round 135° rainwater pipe bend

PIPE SIZE	ANGLE (°)	DIM A	DIM B	CODE SUFFIX
63 / 76	92.5	100 (S) / 105 (CEC)	100	06
63 / 76	112.5	100 (S) / 105 (CEC)	100	07
63 / 76	135	100 (S) / 105 (CEC)	100	08
63 / 76	Non-Standard	100 (S) / 105 (CEC)	100	09
102 / 152	92.5	100 (S) / 120 (CEC)	100	06
102 / 152	112.5	100 (S) / 120 (CEC)	100	07
102 / 152	135	100 (S) / 120 (CEC)	100	08
102 / 152	Non-Standard	100 (S) / 120 (CEC)	100	09

### Key Features

- ✓ Precision-engineered pipe bends for reliable directional changes in rainwater flow
- ✓ Available in various angles to accommodate different building configurations
- ✓ Compatible with all Stormguard pipe profiles and designed to maintain consistent water flow throughout the system
- ✓ Manufactured to the same high-quality standards as straight pipe sections for seamless integration

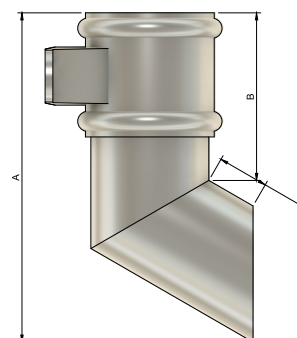
# Circular Rainwater Pipe

## Shoes

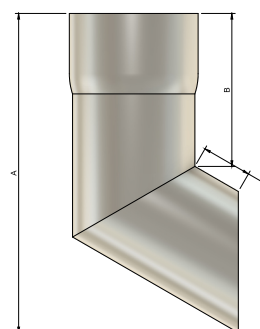
PIPE SIZE	DIM A	DIM B	DIM C	CODE
63	185	100	30	PR63/10
76	200	100	30	PR76/10
102	230	100	30	PR102/10
152	290	100	30	PR152/10

### Key Features

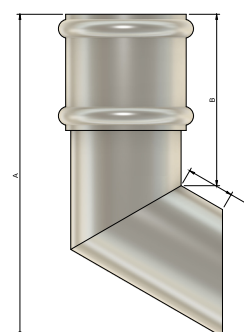
- ✓ Purpose-designed outlet components that direct water from the vertical downpipe to the drainage system or ground discharge point
- ✓ Creates a professional finish at ground level while effectively channelling water away from building foundations
- ✓ Prevents ground erosion and splashback while ensuring controlled water dispersal away from building foundations



PRS1 — Cast eared collar round rainwater pipe shoe



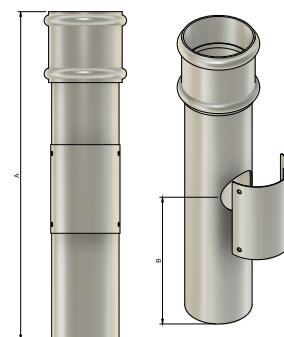
PRS3 — Swaged collar round rainwater pipe shoe



PRS2 — Cast non-eared collar round rainwater pipe shoe

## Rodding Access Pipes

PIPE SIZE	DIM A	DIM B	CODE
63	350	150	PR63/11
76	350	150	PR76/11
102	350	150	PR102/11
152	350	150	PR152/11



PRRA1 — Cast non-eared collar round rodding access pipe

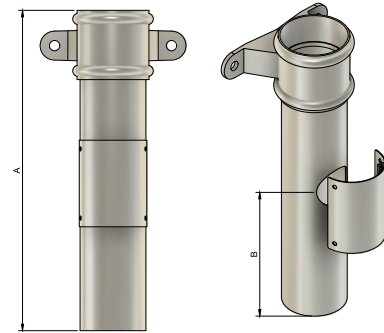


# Circular Rainwater Pipe

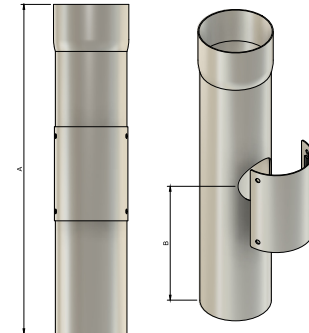
## Rodding Access Pipes (continued)

### Key Features

- ✓ Essential maintenance components providing convenient access points for system inspection and cleaning
- ✓ Enables blockage clearance without disrupting the entire pipework system
- ✓ Seamlessly integrates with standard pipe profiles while maintaining system integrity and aesthetic consistency
- ✓ Recommended for strategic placement in complex drainage systems

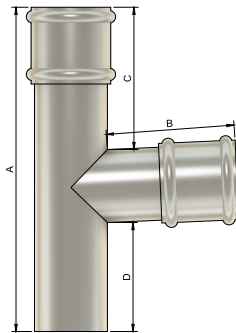


PRRA2 — Cast eared collar round rodding access pipe

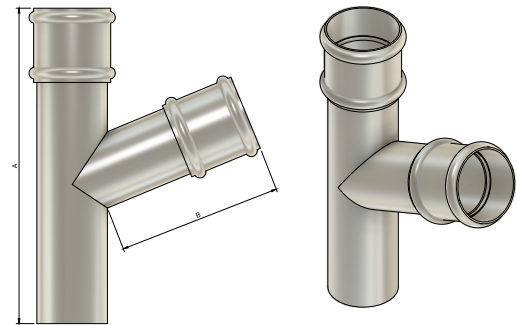


PRRA3 — Swaged collar round rodding access pipe

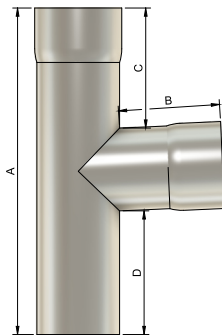
## Y Junctions



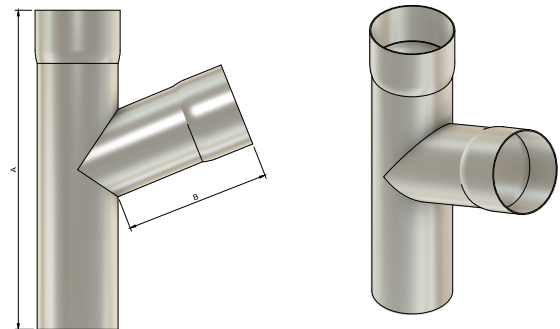
PRY1 — Cast non-eared collar round 92.5° Y junction



PRY3 — Cast non-eared collar round 112.5° Y junction



PRY2 — Swaged collar round 92.5° Y junction



PRY4 — Swaged collar round 112.5° Y junction

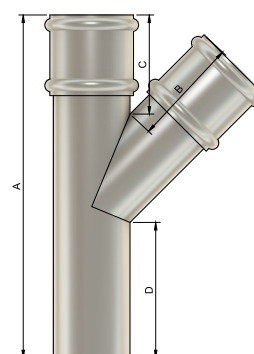
# Circular Rainwater Pipe

## Y Junctions (continued)

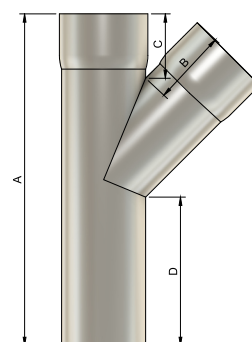
PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
63	92.5	400	150	150	217	PR63/12
63	112.5	400	150	150	213	PR63/13
63	135	400	150	150	160	PR63/14
63	Non-Standard	400	150	150	Variable	PR63/15
76	92.5	400	150	150	216	PR76/12
76	112.5	400	150	150	211.5	PR76/13
76	135	400	150	150	140	PR76/14
76	Non-Standard	400	150	150	Variable	PR76/15
102	92.5	400	150	150	221.5	PR102/12
102	112.5	400	150	150	216	PR102/13
102	135	400	150	150	116	PR102/14
102	Non-Standard	400	150	150	Variable	PR102/15
152	92.5	400	150	150	104.5	PR152/12
152	112.5	400	150	150	93.5	PR152/13
152	135	400	150	150	45	PR152/14
152	Non-Standard	400	150	150	Variable	PR152/15

### Key Features

- ✓ Specialised fittings designed to merge water flow from two separate downpipes into a single downpipe system
- ✓ Engineered for optimal hydraulic performance to prevent backflow or water build-up
- ✓ Compatible with all standard Stormguard pipe profiles and manufactured to the same exacting standards as the main system components



PRY5 — Cast non-eared collar round 135° Y junction



PRY6 — Swaged collar round 135° Y junction



### CONTACT US

01625 665 096

rainwatersales@stormguard.co.uk

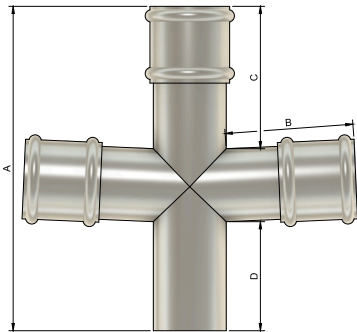
www.stormguardrainwater.co.uk

Augustus Mill, Buckley Street, Macclesfield SK11 6UH

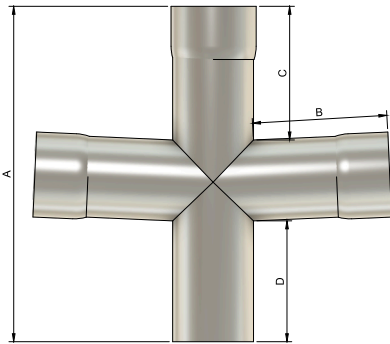


# Circular Rainwater Pipe

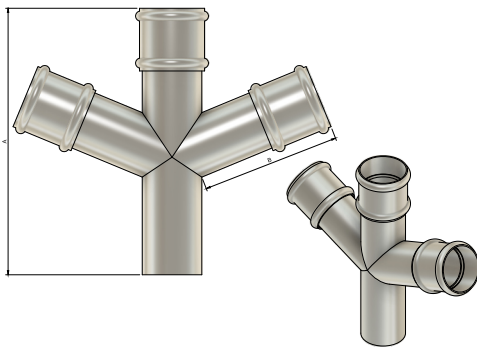
## Double Branches



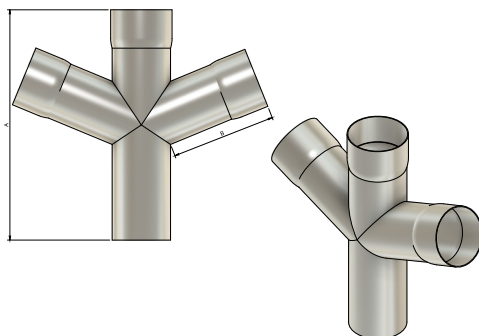
PRDB1 — Cast non-eared collar round 92.5° double branch



PRDB2 — Swaged collar round 92.5° double branch



PRDB3 — Cast non-eared collar round 112.5° double branch



PRDB4 — Swaged collar round 112.5° double branch

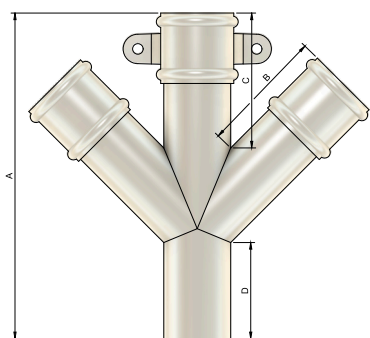
PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
63	92.5	400	150	150	217	PR63/16
63	112.5	400	150	150	213 (S) / 215 (C)	PR63/17
63	135	400	150	150	160	PR63/18
63	Non-Standard	400	150	150	Variable	PR63/19
76	92.5	400	150	150	216	PR76/16
76	112.5	400	150	150	211.5	PR76/17
76	135	400	150	150	140	PR76/18
76	Non-Standard	400	150	150	Variable	PR76/19
102	92.5	400	150	150	221.5	PR102/16
102	112.5	400	150	150	216	PR102/17
102	135	400	150	150	116	PR102/18
102	Non-Standard	400	150	150	Variable	PR102/19
152	92.5	400	150	150	104.5	PR152/16
152	112.5	400	150	150	95.5	PR152/17
152	135	400	150	150	45	PR152/18
152	Non-Standard	400	150	150	Variable	PR152/19

### Key Features

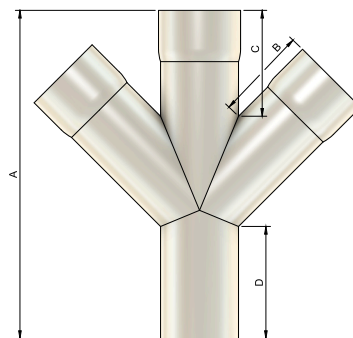
- ✓ Versatile connection components enabling multiple inlet configurations for complex rainwater management solutions
- ✓ Allows efficient water collection from multiple sources into a single downpipe system
- ✓ Precision-engineered to maintain proper flow rates and prevent system overloading
- ✓ Available for both circular and rectangular pipe systems

# Circular Rainwater Pipe

## Double Branches (continued)



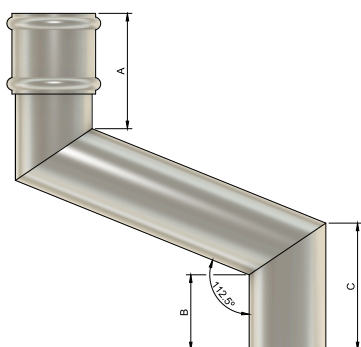
PRDB5 — Cast eared collar round 135° double branch



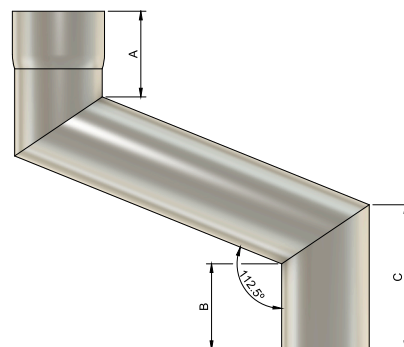
PRDB6 — Swaged collar round 135° double branch

## One-Part Offsets

PIPE SIZE	TYPE	PROJECTION	DIM A	DIM B	DIM C	CODE PREFIX
63	One-Part	63-149	100	100	142	PR63/16
76	One-Part	63-149	100	100	155	PR76/16
102	One-Part	63-149	100	100	168	PR102/16
152	One-Part	63-149	100	100	195	PR152/16



PRO1 — Cast non-eared collar round one-part offset



PRO2 — Swaged collar round one-part offset

### Key Features

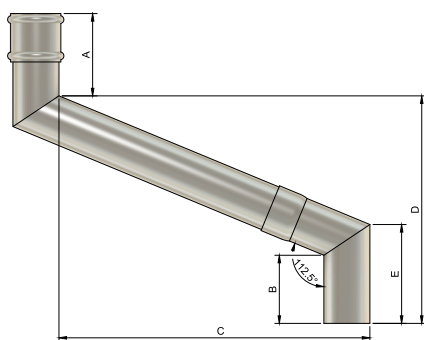
- ✓ Adaptable components designed to navigate architectural features by creating horizontal displacement in vertical pipework
- ✓ Available in various projection sizes to accommodate different wall-to-fascia distances
- ✓ Enables clean, professional installation around building projections, cornices or other structural elements while maintaining system efficiency



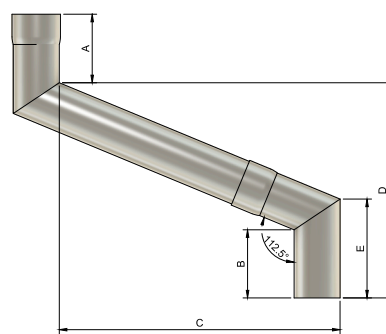
# Circular Rainwater Pipe

## Two-Part Offsets

PIPE SIZE	TYPE	PROJECTION	DIM A	DIM B	DIM C	DIM D	DIM E	CODE PREFIX
63	Two-Part	150-400	100	100	485	308	142	PR63/23
63	Two-Part	401-750	100	100	840	453	142	PR63/18
63	Two-Part	751-1000	100	100	1090	556	142	PR63/19
76	Two-Part	150-400	100	100	485	317	155	PR76/17
76	Two-Part	401-750	100	100	840	462	155	PR76/18
76	Two-Part	751-1000	100	100	1090	565	155	PR76/19
102	Two-Part	150-400	100	100	485	334	168	PR102/17
102	Two-Part	401-750	100	100	840	479	168	PR102/18
102	Two-Part	751-1000	100	100	1090	582	168	PR102/19
152	Two-Part	150-400	100	100	485	367.5	195	PR152/17
152	Two-Part	401-750	100	100	840	512.5	195	PR152/18
152	Two-Part	751-1000	100	100	1090	616	195	PR152/19

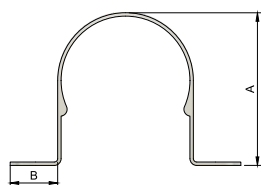
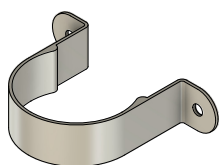


PRO3 — Cast non-eared collar round two-part offset

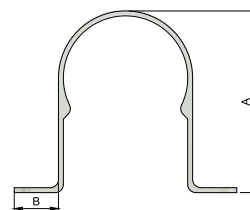
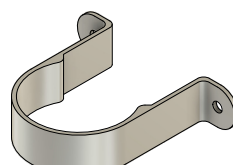


PRO4 — Swaged collar round two-part offset

## Brackets



PRB1 — Flush fit pipe bracket



PRB2 — 30mm stand-off pipe bracket

# Circular Rainwater Pipe

## Brackets (continued)

PIPE SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
63	Flush Fit	72.5	30		
63	Stand-Off	102	30		
63	Two-Part Variable	100	125	30	
76	Flush Fit	85	30		
76	Stand-Off	111	30		
76	Two-Part Variable	100	125	30	
102	Flush Fit	110	30		
102	Stand-Off	137.5	30		
102	Two-Part Variable	100	125	30	
152	Two-Part Variable	100	125	30	

### Key Features

- ✓ Adaptable components designed to navigate architectural features by creating horizontal displacement in vertical pipework
- ✓ Available in various projection sizes to accommodate different wall-to-fascia distances
- ✓ Enables clean, professional installation around building projections, cornices or other structural elements while maintaining system efficiency

Note: Only two-part variable brackets are available for 152mm pipe.

## Loose Collars

PIPE SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
63	Cast Collar	75	72		
63	Cast Eared Collar	75	72	150	
76	Cast Collar	80	83		
76	Cast Eared Collar	80	83	160	
102	Cast Collar	100	108		
102	Cast Eared Collar	100	108	183	
152	Cast Collar	?	?		
152	Cast Eared Collar	?	?	?	

### Key Features

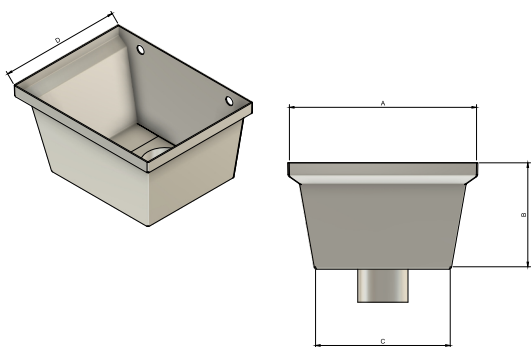
- ✓ Decorative pipe fittings available in die-cast aluminium (with or without traditional lugs) or swaged aluminium designs
- ✓ Enhances rainwater systems with authentic period charm (or: Adds distinguished Victorian character) while providing additional support at pipe joints
- ✓ Compatible with all standard Stormguard pipe profiles and available in matching powder-coated finishes for a cohesive appearance



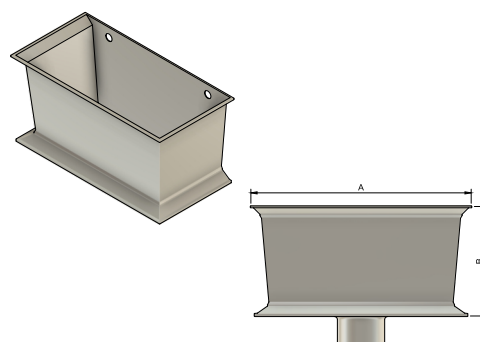
# Circular Rainwater Pipe

## Hopper Heads

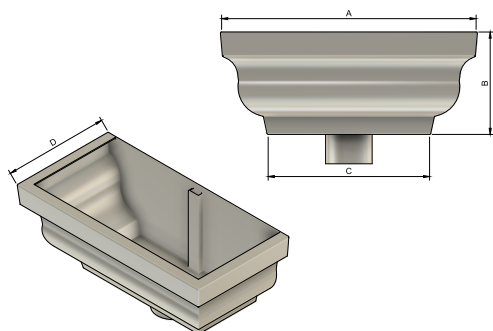
TYPE	DIM A	DIM B	DIM C	DIM D	DIM E	CODE SUFFIX
Universal	255	177	205	180		
Augustus	401	150	240	195		
Cranford	375	175	355	186	395	



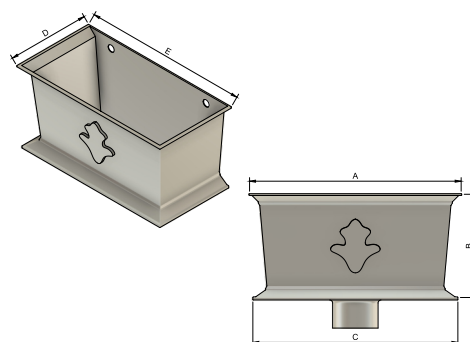
PRH1 — Universal hopper head to suit round rainwater pipe



PRH3 — Cranford hopper head to suit round rainwater pipe



PRH2 — Augustus hopper head to suit round rainwater pipe



PRH4 — Cranford hopper head with fleur de lis

### Key Features

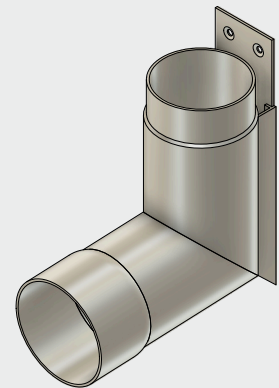
- ✓ Elegant collection vessels that direct water from gutters to downpipes while adding architectural interest to the building exterior
- ✓ Available in both cast aluminium (for traditional aesthetics with intricate detailing) and bespoke folded aluminium (for contemporary designs or specific size requirements)
- ✓ Compatible with all standard Stormguard pipe profiles and available in matching powder-coated finishes for a cohesive appearance

# TECHNICAL DATA SHEET



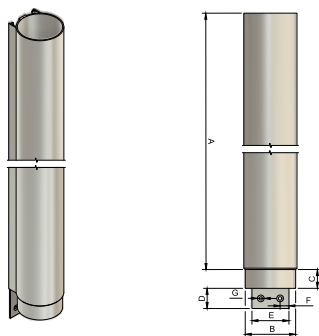
## CIRCULAR SECURITY PIPE

Stormguard's circular security pipes provide anti-vandal protection for properties in high-risk areas where climbing deterrence is essential. Available in 75mm and 100mm diameters, these pipes feature a flush-fitting design with concealed joints and fixings that eliminate external grip points. The concealed fixing system ensures clean lines while providing the robust security features required for schools, commercial premises and other vulnerable buildings.



## Lengths

PIPE SIZE	PIPE LENGTH (A)	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	CODE PREFIX
75Ø	2000	76?	50	30	55	15	10	SPR3/3
75Ø	1000	76?	50	30	55	15	10	SPR3/4
75Ø	500	76?	50	30	55	15	10	SPR3/5
100Ø	2000	102?	50	30	76	15	10	SPR4/3
100Ø	1000	102?	50	30	76	15	10	SPR4/4
100Ø	500	102?	50	30	76	15	10	SPR4/5



PRSL1 — Length of round security pipe

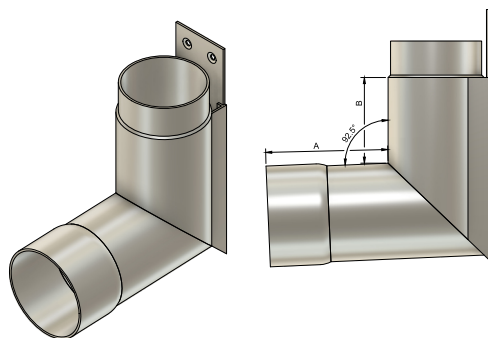
## Key Features

- ✓ Premium extruded aluminium circular security pipes available in 76mm and 102mm diameters with anti-vandal flush-fitting design
- ✓ Manufactured from high-quality extruded aluminium tube with minimum 1.6mm wall gauge for exceptional strength and tamper resistance
- ✓ Standard lengths up to 3 metres in half-metre increments
- ✓ Features concealed joints and fixings that eliminate external grip points, making them ideal for schools, commercial premises and other high-risk areas requiring climbing deterrence

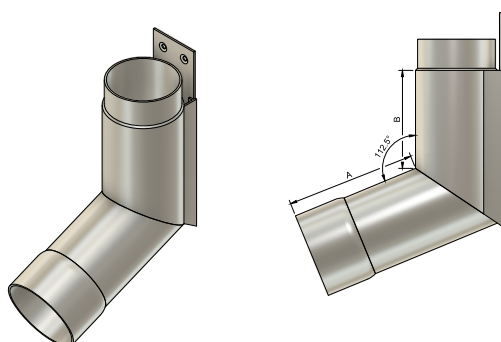


# Circular Security Pipe

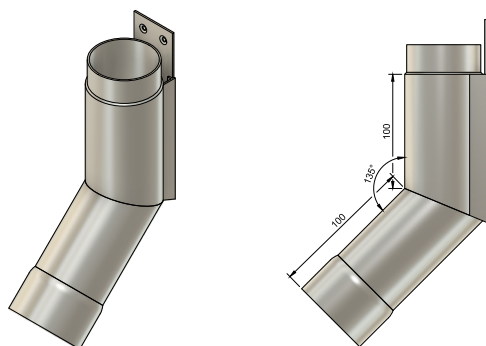
## Bends



PRSB1 — 92.5° round security pipe bend



PRSB2 — 112.5° round security pipe bend



PRSB3 — 135° round security pipe bend

PIPE SIZE	ANGLE (°)	COLLAR TYPE	DIM A	DIM B	CODE PREFIX
75Ø	92.5	Swaged	100	100	SPR3/6
75Ø	112.5	Swaged	100	100	SPR3/7
75Ø	135	Swaged	100	100	SPR3/8
75Ø	Non-Standard	Swaged	100?	100?	SPR3/9
100Ø	92.5	Swaged	100	100	SPR4/6
100Ø	112.5	Swaged	100	100	SPR4/7
100Ø	135	Swaged	100	100	SPR4/8
100Ø	Non-Standard	Swaged	100?	100?	SPR4/9

### Key Features

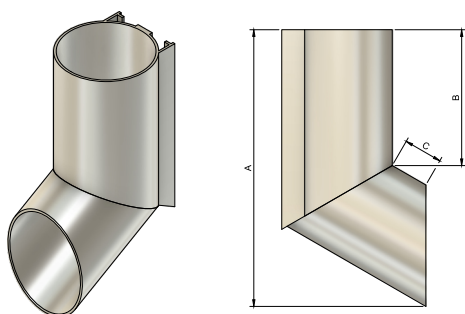
- ✓ Precision-engineered security pipe bends maintaining the flush-fitting anti-vandal characteristics throughout directional changes
- ✓ Available in various angles to accommodate different building configurations while preserving the concealed joint system that prevents unauthorised access
- ✓ Compatible with circular security pipe profiles and designed to maintain consistent tamper-resistant performance throughout the drainage system



# Circular Security Pipe

## Shoes

PIPE SIZE	DIM A	DIM B	DIM C	CODE PREFIX
75Ø	216	100	30	SPR3/22
100Ø	246	100	30	SPR4/22



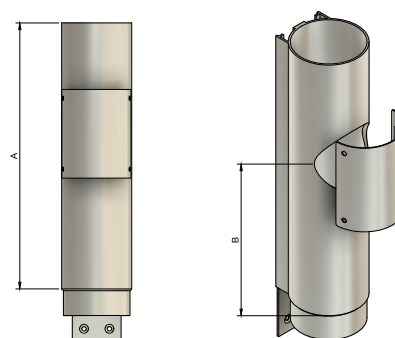
PRSS1 — Round security rainwater pipe shoe

### Key Features

- ✓ Purpose-designed anti-vandal outlet components that direct water from circular security downpipes to drainage systems while maintaining tamper-resistant characteristics
- ✓ Features flush-fitting design with concealed connections that eliminate climbing opportunities at ground level
- ✓ Creates a professional security finish while effectively channelling water away from building foundations

## Rodding Access Pipes

PIPE SIZE	DIM A	DIM B	CODE PREFIX
75Ø	350	150	SPR3/23
100Ø	350	150	SPR4/23



PRSRA1 — Round rodding access security pipe

### Key Features

- ✓ Essential maintenance components providing convenient access points for circular security pipe system inspection and cleaning while preserving anti-vandal characteristics
- ✓ Features concealed access design that enables blockage clearance without compromising the tamper-resistant properties of the system
- ✓ Seamlessly integrates with security pipe profiles while maintaining flush-fitting appearance and climbing deterrence capabilities throughout the installation



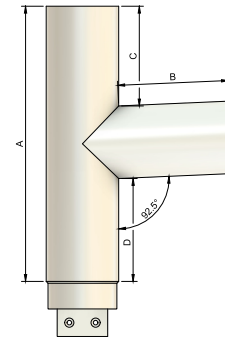
# Circular Security Pipe

## Y Junctions

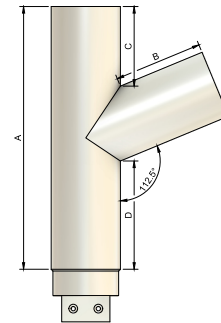
PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
75Ø	92.5					
75Ø	112.5					
75Ø	135					
75Ø	Non-Standard					
100Ø	92.5					
100Ø	112.5					
100Ø	135					
100Ø	Non-Standard					

### Key Features

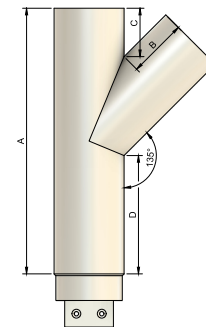
- ✓ Specialised fittings designed to merge water flow from two separate downpipes into a single downpipe system
- ✓ Engineered for optimal hydraulic performance to prevent backflow or water build-up
- ✓ Compatible with all standard Stormguard pipe profiles and manufactured to the same exacting standards as the main system components



PRSY1 — 92.5° Y junction for round security pipe

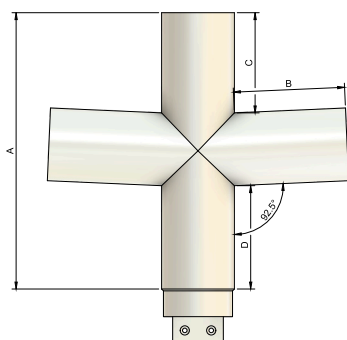


PRSY3 — 112.5° Y junction for round security pipe

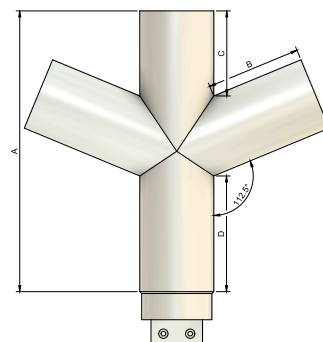


PRSY5 — 135° Y junction for round security pipe

## Double Branches



PRSDB1 — 92.5° double branch for round security pipe



PRSDB3 — 112.5° double branch for round security pipe

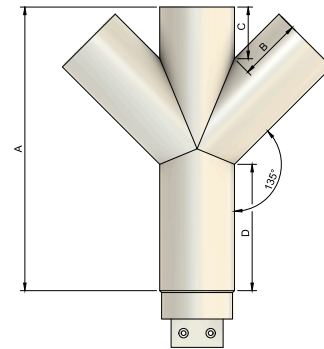
# Circular Security Pipe

## Double Branches (continued)

PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
75Ø	92.5					
75Ø	112.5					
75Ø	135					
75Ø	Non-Standard					
100Ø	92.5					
100Ø	112.5					
100Ø	135					
100Ø	Non-Standard					

### Key Features

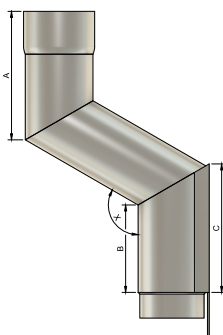
- ✓ Versatile connection components enabling multiple inlet configurations for complex rainwater management solutions
- ✓ Allows efficient water collection from multiple sources into a single downpipe system
- ✓ Precision-engineered to maintain proper flow rates and prevent system overloading
- ✓ Available for both circular and rectangular pipe systems



PRSDB5 — 135° double branch for round security pipe

## One-Part Offsets

PIPE SIZE	TYPE	PROJECTION	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
75Ø	One-Part	63-149	112.5°	159	100	160	SPR3/18
100Ø	One-Part	63-149	112.5°	178	100	175	SPR4/18



PRSO1 — One-part offset for round security pipe

### Key Features

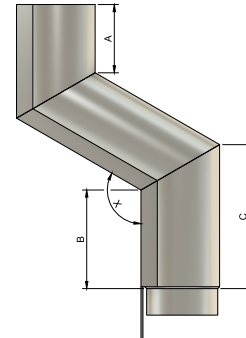
- ✓ Anti-vandal offset components designed to navigate architectural features while maintaining the flush-fitting security characteristics
- ✓ Available in various projection sizes with concealed joint systems that preserve climbing deterrence properties
- ✓ Enables clean, professional installation around building projections while ensuring consistent tamper-resistant performance throughout the system



# Circular Security Pipe

## Plinth Offsets

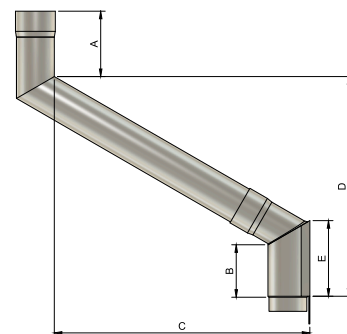
PIPE SIZE	TYPE	PROJECTION	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
75Ø	Plinth	63-149	112.5°	100	100	159	SPR3/18B
100Ø	Plinth	63-149	112.5°	100	100	178	SPR4/18B



PRSO2 — Plinth offset for round security pipe

## Two-Part Offsets

PIPE SIZE	TYPE	PROJECTION	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	DIM E	CODE PREFIX
75Ø	Two-Part	150-400	112.5°	100	100	485	334	160	SPR3/19
75Ø	Two-Part	401-750	112.5°	100	100	840	479	160	SPR3/20
75Ø	Two-Part	751-1000	112.5°	100	100	1090	582	160	SPR3/21
100Ø	Two-Part	150-400	112.5°	100	100	485	317	175	SPR4/19
100Ø	Two-Part	401-750	112.5°	100	100	840	462	175	SPR4/20
100Ø	Two-Part	751-1000	112.5°	100	100	1090	565	175	SPR4/21



PRSO3 — Two-part offset for round security pipe



### CONTACT US

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Augustus Mill, Buckley Street, Macclesfield SK11 6UH

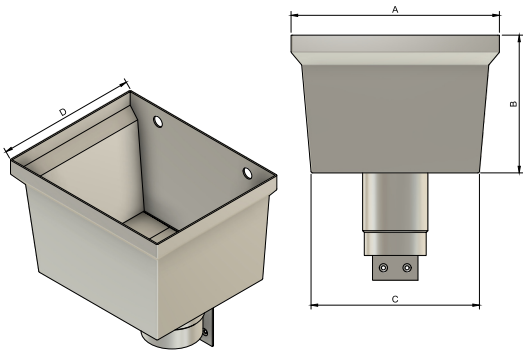
# Circular Security Pipe

## Hopper Heads

PIPE SIZE	TYPE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
75Ø	Universal	255	177	205	180	
100Ø	Universal	255	177	205	180	

### Key Features

- ✓ Elegant anti-vandal collection vessels designed specifically for circular security pipe systems, directing water from gutters to downpipes while maintaining tamper-resistant characteristics
- ✓ Features flush-fitting design with concealed connections that eliminate external grip points and climbing opportunities
- ✓ Available in security-focused designs that complement the anti-vandal properties of the complete circular security drainage system while adding architectural interest to high-risk building exteriors



PRSH1 — Universal hopper head to suit round security pipe





# TECHNICAL DATA SHEET



## SQUARE & RECTANGULAR RAINWATER PIPE

All Rainwater Pipes are made from heavy-grade extruded aluminium tube with a minimum 1.6mm wall gauge.

The 63mm, 76mm and 102mm diameter pipes have either decorative diecast aluminium collars with or without traditional lugs or swaged aluminium collars with extruded pipe brackets in the modern style.

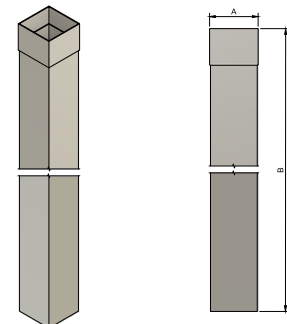
The 150mm diameter pipes have feature made collars and fixing brackets to suit standard pipe lengths.



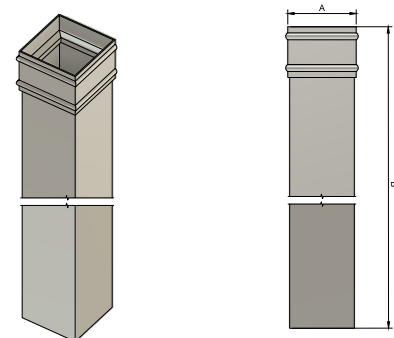
### Lengths

PIPE SIZE	COLLAR WIDTH (A)	DIM C	DIM D	CODE PREFIX
76x76	107 (W) / 109 (CE / C)			PS76
102x76	107 (W) / 110 (CE / C)			PS43
102x102	107 (W) / 109 (CE / C)			PS102
152x152	? / ?			PS152

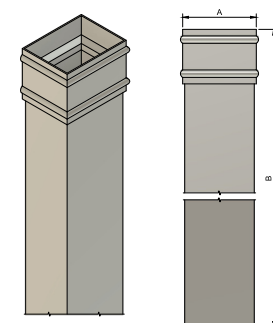
PIPE LENGTH (B)	LENGTH CODE
3070 (W) / 3050 (CE / C)	01
2570 (W) / 2550 (CE / C)	02
2070 (W) / 2050 (CE / C)	03
1570 (W) / 1550 (CE / C)	03A
1070 (W) / 1050 (CE / C)	04
570 (W) / 550 (CE / C)	05



PSL1 — Length of fabricated collar square pipe



PSL3 — Length of cast non-eared collar square pipe



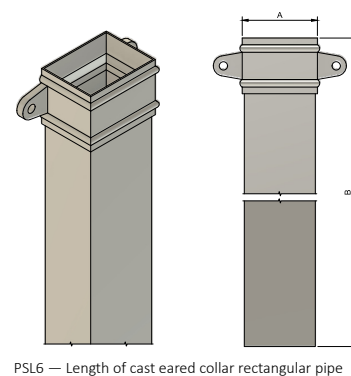
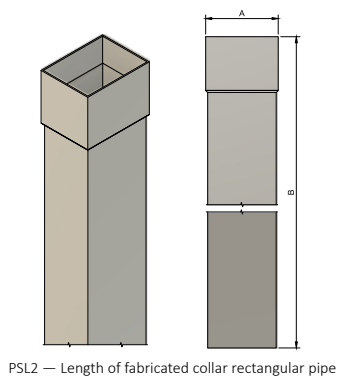
PSL4 — Length of cast non-eared collar rectangular pipe

### Key Features

- ✓ Premium extruded aluminium downpipes available in square/rectangular (76x76mm, 102x76mm, 102x102mm, 150x150mm) profiles
- ✓ Manufactured from high-quality extruded aluminium tube with minimum 1.6mm wall gauge for exceptional strength and durability
- ✓ Standard lengths up to 3 metres in half-metre increments
- ✓ Suitable for residential, commercial and industrial applications with security options available for high-risk areas

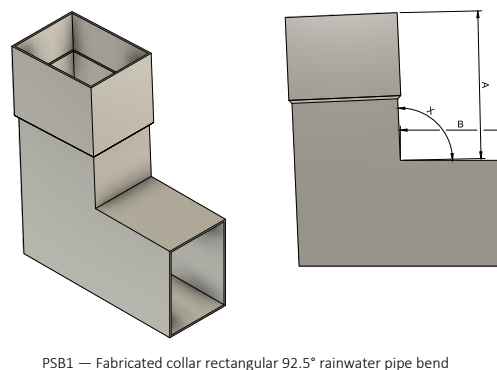
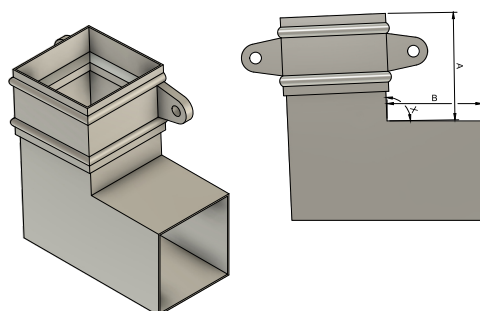
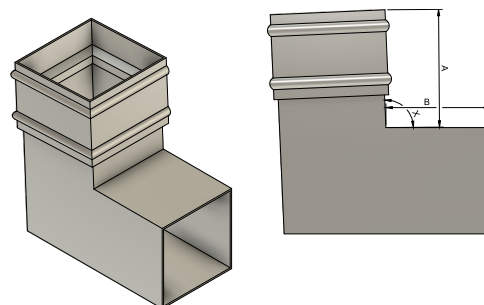
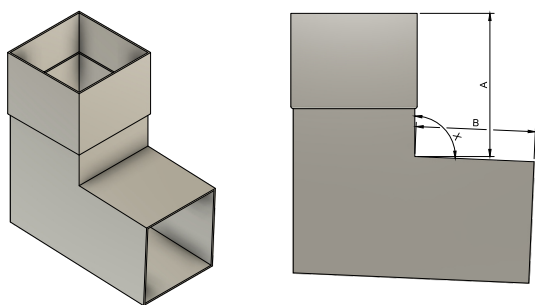
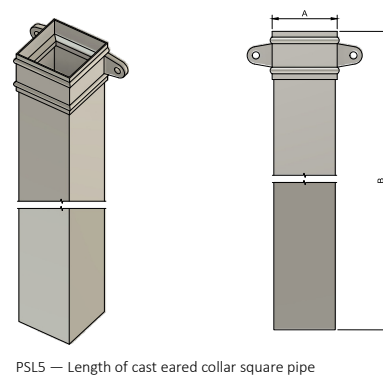
# Square & Rectangular Rainwater Pipe

## Lengths (continued)



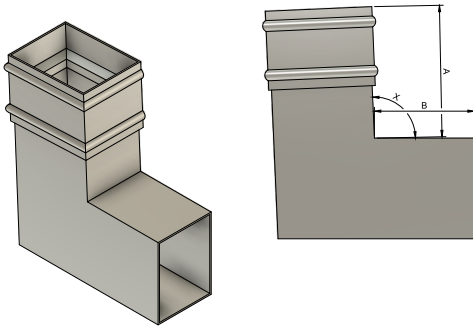
## 92.5° Bends

PIPE SIZE	ANGLE X (°)	DIM A	DIM B	CODE PREFIX
76x76	92.5	100	100	PS76/06
102x76	92.5	100	100	PS43/06
102x102	92.5	100	100	PS102/06
152x152	92.5	100	100	PS152/06

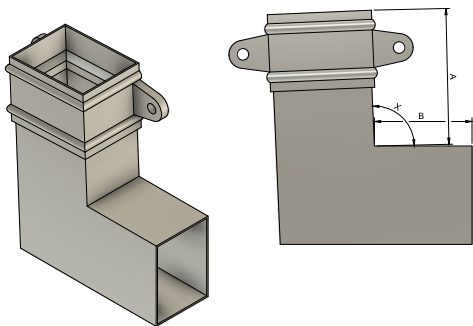


# Square & Rectangular Rainwater Pipe

## 92.5° Bends (continued)



PSB1 — Cast non-eared collar rectangular 92.5° rainwater pipe bend



PSB1 — Cast eared collar rectangular 92.5° rainwater pipe bend

### Key Features

- ✓ Precision-engineered pipe bends for reliable directional changes in rainwater flow
- ✓ Available in various angles to accommodate different building configurations
- ✓ Compatible with all Stormguard pipe profiles and designed to maintain consistent water flow throughout the system
- ✓ Manufactured to the same high-quality standards as straight pipe sections for seamless integration

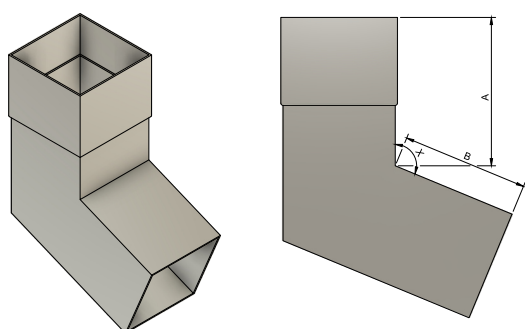




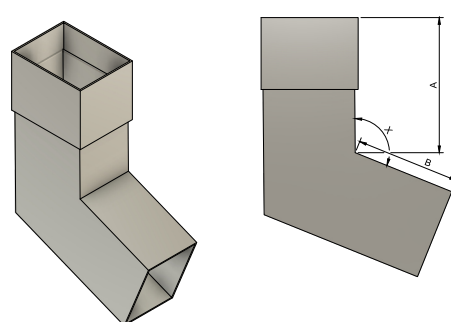
# Square & Rectangular Rainwater Pipe

## 112.5° Bends

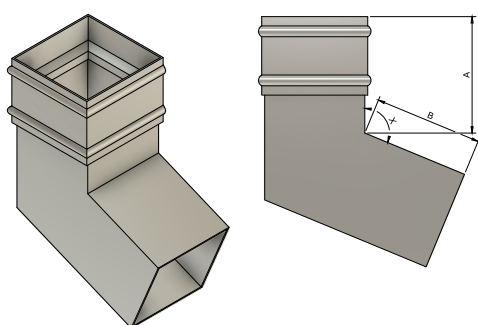
PIPE SIZE	ANGLE (°)	DIM A	DIM B	CODE PREFIX
76x76	112.5	100	100	PS76/07
102x76	112.5	100	100	PS43/07
102x102	112.5	100	100	PS102/07
152x152	112.5	100	100	PS152/07



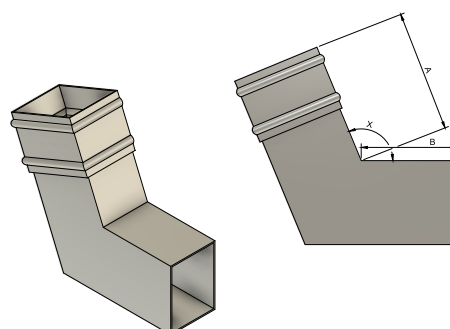
PSB4 — Fabricated collar square 112.5° rainwater pipe bend



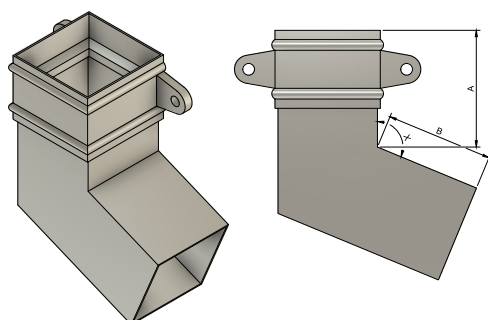
PSB1 — Fabricated collar rectangular 112.5° rainwater pipe bend



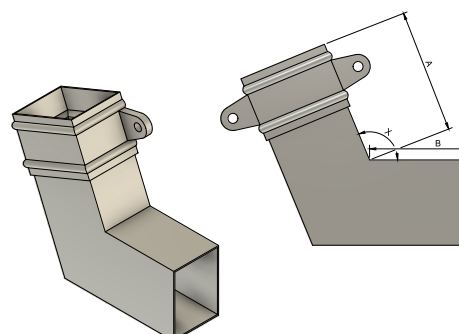
PSB5 — Cast non-eared collar square 112.5° rainwater pipe bend



PSB1 — Cast non-eared collar rectangular 112.5° rainwater pipe bend



PSB6 — Cast eared collar square 112.5° rainwater pipe bend

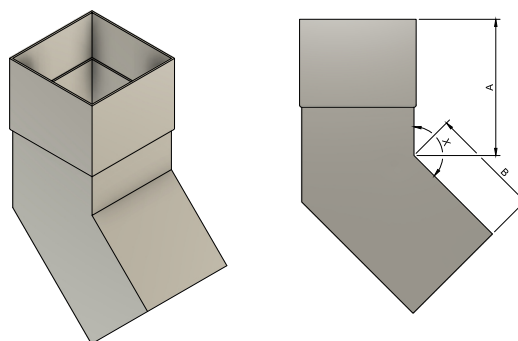


PSB1 — Cast eared collar rectangular 112.5° rainwater pipe bend

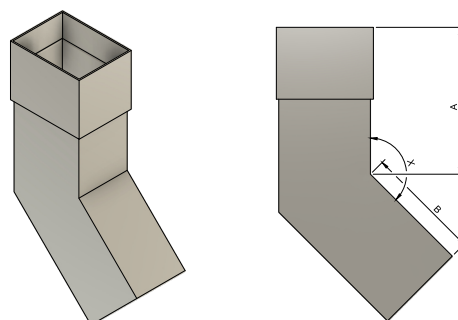
# Square & Rectangular Rainwater Pipe

## 135° & Non-Standard Bends

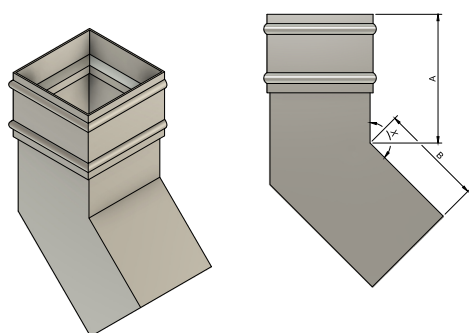
PIPE SIZE	ANGLE (°)	DIM A	DIM B	CODE PREFIX
76x76	135	100	100	PS76/08
76x76	Non-Standard	100	100	PS76/09
102x76	135	100	100	PS43/08
102x76	Non-Standard	100	100	PS43/09
102x102	135	100	100	PS102/08
102x102	Non-Standard	100	100	PS102/09
152x152	135	100	100	PS152/08
152x152	Non-Standard	100	100	PS152/09



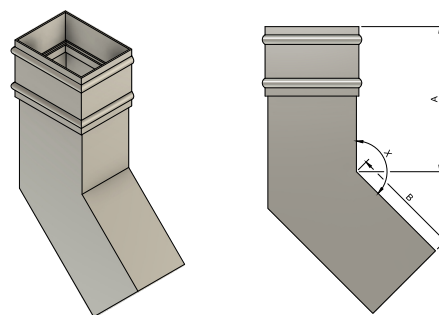
PSB7 — Fabricated collar square 135° rainwater pipe bend



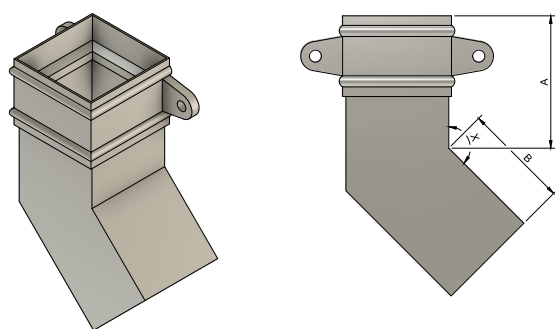
PSB1 — Fabricated collar rectangular 135° rainwater pipe bend



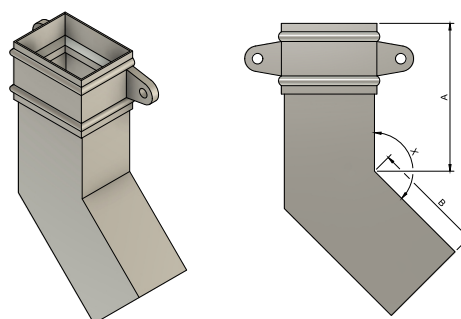
PSB8 — Cast non-eared collar square 135° rainwater pipe bend



PSB1 — Cast non-eared collar rectangular 135° rainwater pipe bend



PSB9 — Cast eared collar square 135° rainwater pipe bend



PSB1 — Cast eared collar rectangular 135° rainwater pipe bend

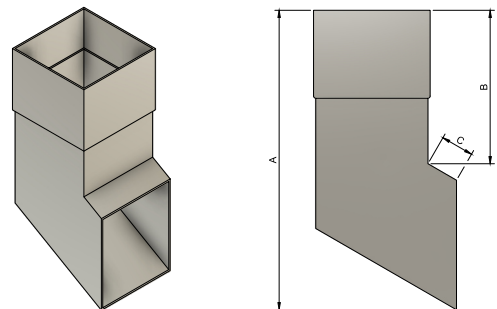
# Square & Rectangular Rainwater Pipe

## Shoes

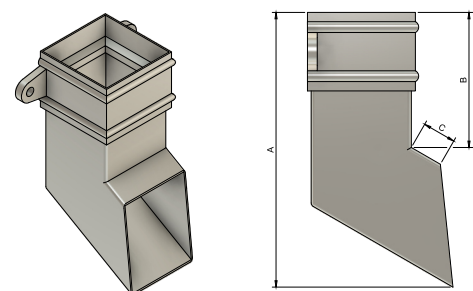
PIPE SIZE	DIM A	DIM B	DIM C	CODE PREFIX
76x76	200	100	30	PS76/10
102x76	200	100	30	PS43/10
102x102	200	100	30	PS102/10
152x152	230	100	30	PS152/10

### Key Features

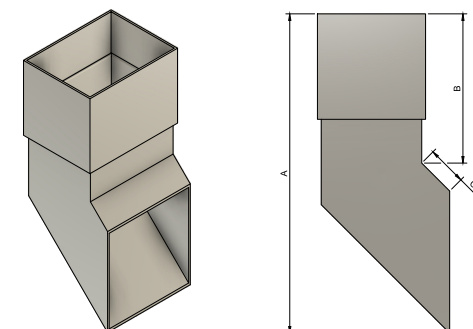
- ✓ Purpose-designed outlet components that direct water from the vertical downpipe to the drainage system or ground discharge point
- ✓ Creates a professional finish at ground level while effectively channelling water away from building foundations
- ✓ Available in designs compatible with all Stormguard pipe profiles and suitable for either direct-to-drain connections or surface discharge requirements



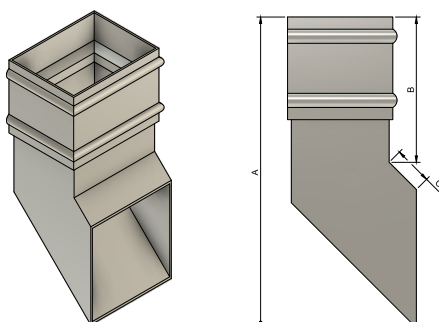
PSS1 — Fabricated collar square rainwater pipe shoe



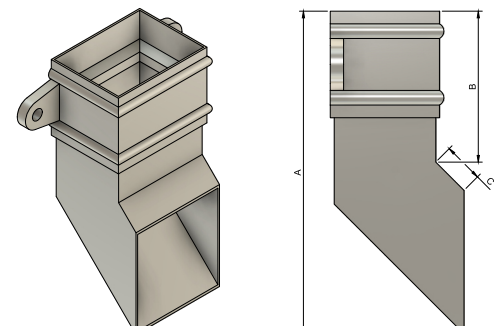
PSS2 — Cast eared collar square rainwater pipe shoe



PSS3 — Fabricated collar rectangular rainwater pipe shoe



PSS4 — Cast non-eared collar rectangular rainwater pipe shoe



PSS5 — Cast eared collar rectangular rainwater pipe shoe



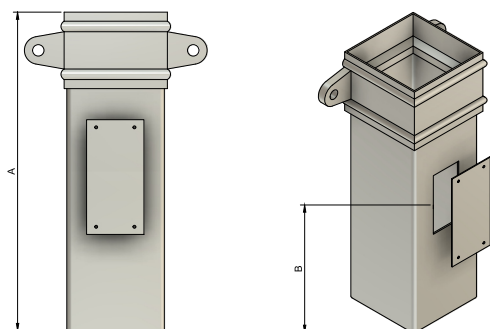
# Square & Rectangular Rainwater Pipe

## Rodding Access Pipes

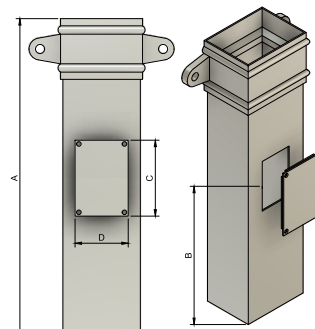
PIPE SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
76x76	350	150	120	90	PS76/11
102x76	350	150	120	90	PS43/11
102x102	350	150	120	90	PS102/11
152x152	350	150	125	140	PS152/11

### Key Features

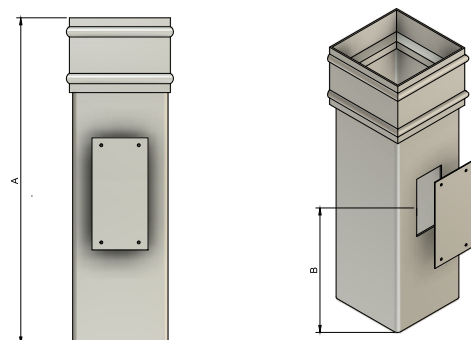
- ✓ Essential maintenance components providing convenient access points for system inspection and cleaning
- ✓ Enables blockage clearance without disrupting the entire pipework system
- ✓ Seamlessly integrates with standard pipe profiles while maintaining system integrity and aesthetic consistency
- ✓ Recommended for strategic placement in complex drainage systems



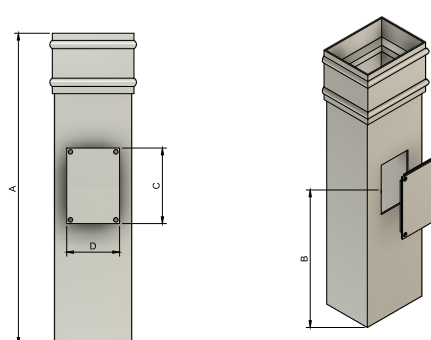
PSRA1 — Cast eared collar square rodding access pipe



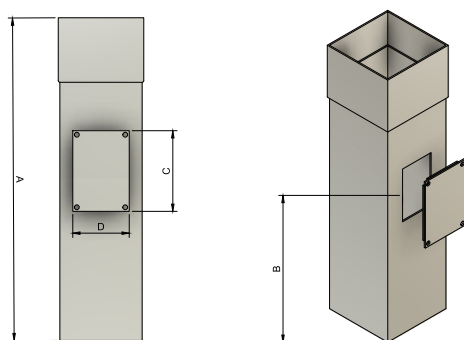
PSS5 — Cast eared collar rectangular rodding access pipe



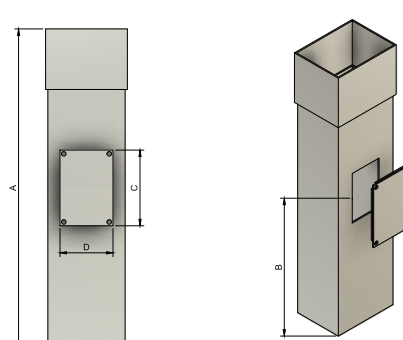
PSRA2 — Cast non-eared collar square rodding access pipe



PSS4 — Cast non-eared collar rectangular rodding access pipe



PSRA3 — Fabricated collar square rodding access pipe

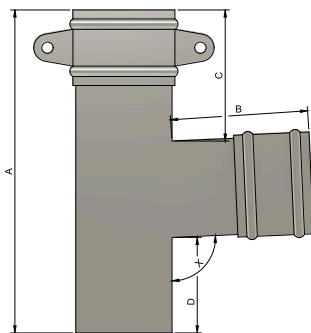


PSL6 — Fabricated collar rectangular rodding access pipe

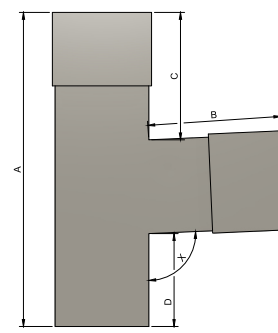
# Square & Rectangular Rainwater Pipe

## Y Junctions

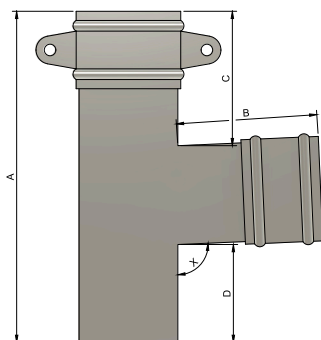
PIPE SIZE	ANGLE X (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
76x76	92.5	400	150	150	140	PS76/12
76x76	112.5	400	150	150	137	PS76/13
76x76	135	400	150	150	108	PS76/14
76x76	Non-Standard	400	150	150	Variable	PS76/15
102x76	92.5	400	150	150	140	PS43/12
102x76	112.5	400	150	150	137	PS43/13
102x76	135	400	150	150	108	PS43/14
102x76	Non-Standard	400	150	150	Variable	PS43/15



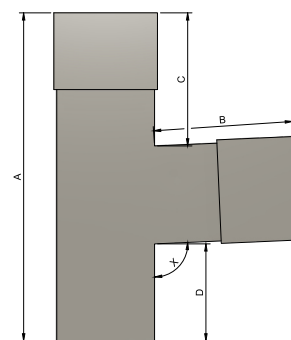
PSY1 — Cast eared collar square 92.5° Y junction



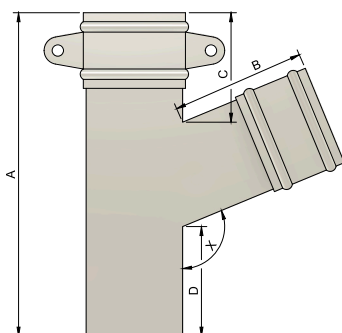
PSY2 — Fabricated collar square 92.5° Y junction



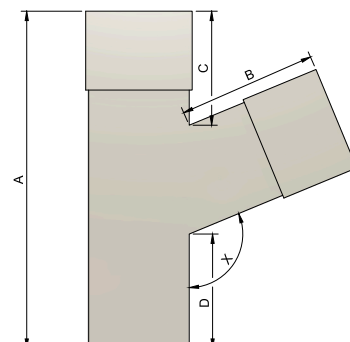
PSY3 — Cast eared collar rectangular 92.5° Y junction



PSY4 — Fabricated collar rectangular 92.5° Y junction



PSY5 — Cast eared collar square 112.5° Y junction

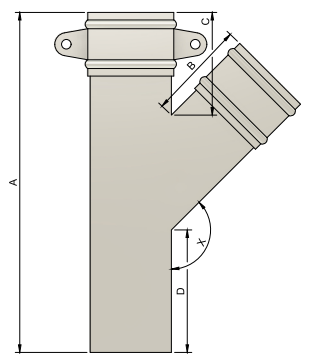


PSY6 — Fabricated collar square 112.5° Y junction

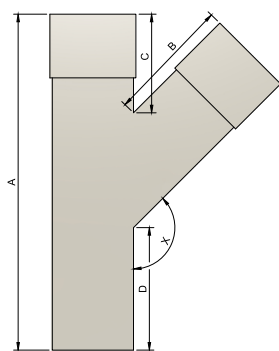
# Square & Rectangular Rainwater Pipe

## Y Junctions (continued)

PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
102x102	92.5	400	150	150	140	PS102/14
102x102	112.5	400	150	150	137	PS102/15
102x102	135	400	150	150	108	PS102/16
102x102	Non-Standard	400	150	150	Variable	PS102/17
152x152	92.5	400	150	150	102	PS152/14
152x152	112.5	400	150	150	69	PS152/15
152x152	135	400	150	150	90	PS152/16
152x152	Non-Standard	400	150	150	Variable	PS152/17



PSY7 — Cast eared collar square 135° Y junction



PSY8 — Fabricated collar square 135° Y junction

### Key Features

- ✓ Specialised fittings designed to merge water flow from two separate downpipes into a single downpipe system
- ✓ Engineered for optimal hydraulic performance to prevent backflow or water build-up
- ✓ Compatible with all standard Stormguard pipe profiles and manufactured to the same exacting standards as the main system components



### CONTACT US

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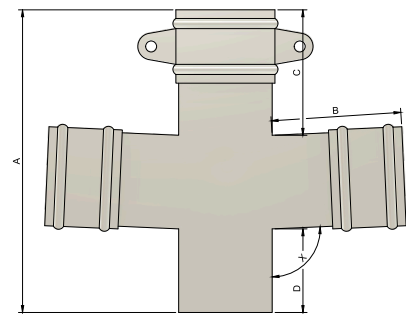
Augustus Mill, Buckley Street, Macclesfield SK11 6UH



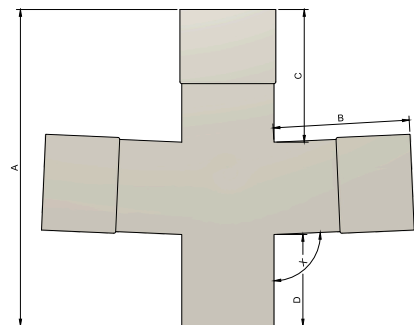
# Square & Rectangular Rainwater Pipe

## Double Branches

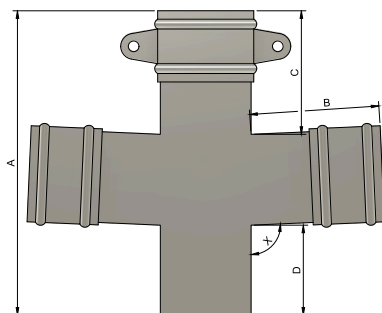
PIPE SIZE	ANGLE X (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
76x76	92.5	400	150	150	140	PS76/16
76x76	112.5	400	150	150	137	PS76/17
76x76	135	400	150	150	108	PS76/18
76x76	Non-Standard	400	150	150	Variable	PS76/19
102x76	92.5	400	150	150	140	PS43/16
102x76	112.5	400	150	150	137	PS43/17
102x76	135	400	150	150	108	PS43/18
102x76	Non-Standard	400	150	150	Variable	PS43/19



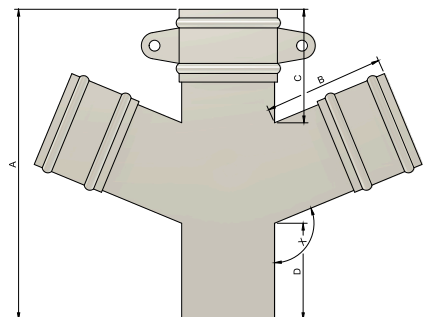
PSDB1 — Cast eared collar square 92.5° double branch



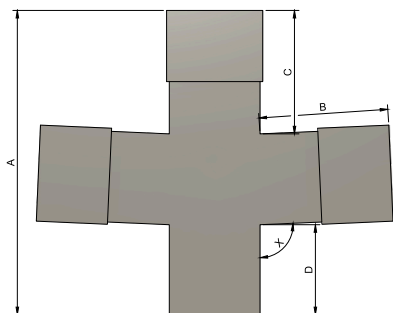
PSDB2 — Fabricated collar square 92.5° double branch



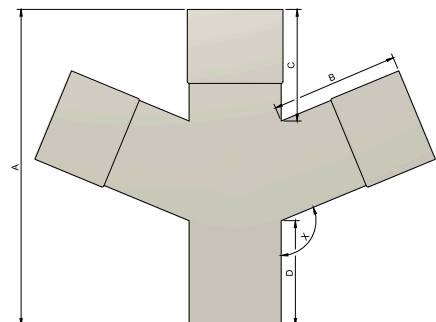
PSDB1 — Cast eared collar rectangular 92.5° double branch



PSDB3 — Cast eared collar square 112.5° double branch



PSDB2 — Fabricated collar rectangular 92.5° double branch



PSDB4 — Fabricated collar square 112.5° double branch

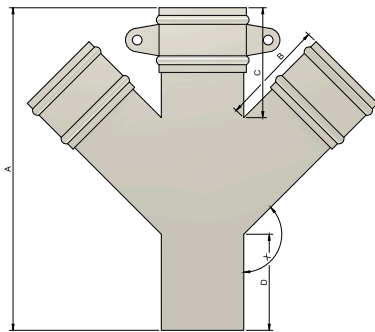
# Square & Rectangular Rainwater Pipe

## Double Branches (continued)

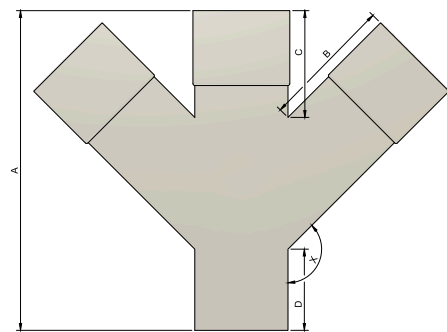
PIPE SIZE	ANGLE X (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
102x102	92.5	400	150	150	140	PS102/16
102x102	112.5	400	150	150	137	PS102/17
102x102	135	400	150	150	108	PS102/18
102x102	Non-Standard	400	150	150	Variable	PS102/19
152x152	92.5	400	150	150	102	PS152/16
152x152	112.5	400	150	150	69	PS152/17
152x152	135	400	150	150	90	PS152/18
152x152	Non-Standard	400	150	150	Variable	PS152/19

### Key Features

- ✓ Versatile connection components enabling multiple inlet configurations for complex rainwater management solutions
- ✓ Allows efficient water collection from multiple sources into a single downpipe system
- ✓ Precision-engineered to maintain proper flow rates and prevent system overloading
- ✓ Available for both circular and rectangular pipe systems



PSDB5 — Cast eared collar square 135° double branch



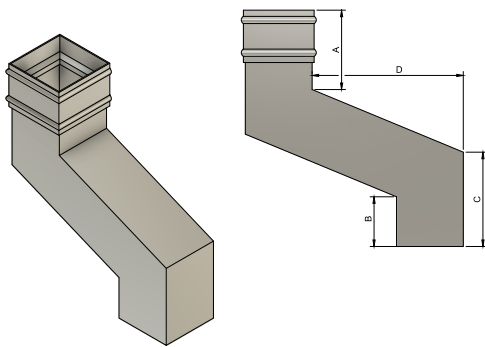
PSDB5 — Fabricated collar square 135° double branch



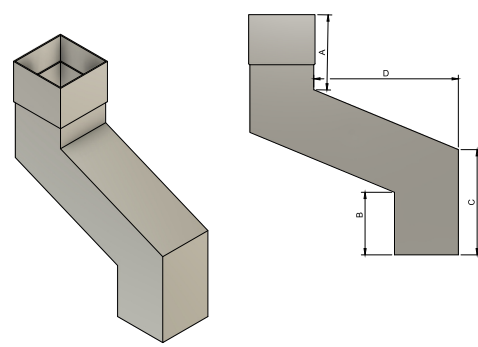
# Square & Rectangular Rainwater Pipe

## One-Part Offsets

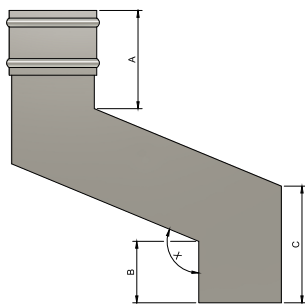
PIPE SIZE	TYPE	PROJECTION	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
76x76	One-Part	63-149	112.5°	100	100	169	PS76/20
102x76	One-Part	63-149	112.5°	100	100	169	PS43/16
102x102	One-Part	63-149	112.5°	100	100	169	PS102/16
152x152	One-Part	63-149	112.5°	100	100	205	PS152/16



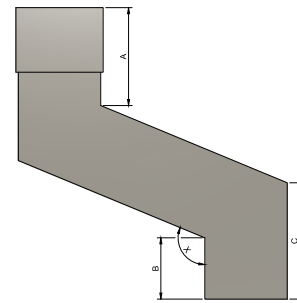
PSO1 — Cast non-eared collar square one-part offset



PSO2 — Fabricated collar square one-part offset



PSO3 — Cast non-eared collar rectangular one-part offset



PSDB4 — Fabricated collar rectangular one-part offset

### Key Features

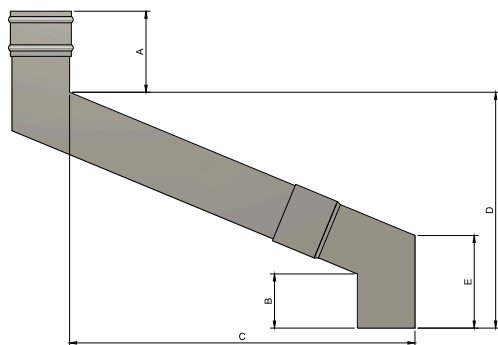
- ✓ Adaptable components designed to navigate architectural features by creating horizontal displacement in vertical pipework
- ✓ Available in various projection sizes to accommodate different wall-to-fascia distances
- ✓ Enables clean, professional installation around building projections, cornices or other structural elements while maintaining system efficiency



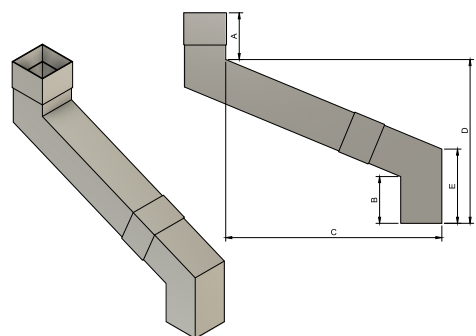
# Square & Rectangular Rainwater Pipe

## Two-Part Offsets

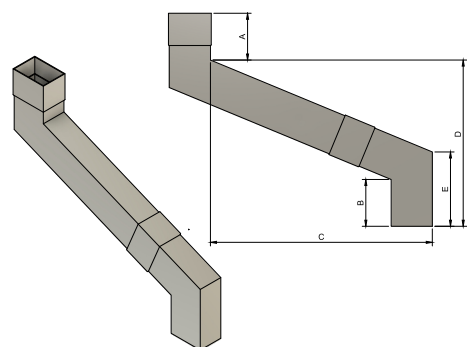
PIPE SIZE	TYPE	PROJECTION	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	DIM E	CODE PREFIX
76x76	Two-Part	150-400	112.5°	100	100	485	317	155	PS76/23
76x76	Two-Part	401-750	112.5°	100	100	840	462	155	PS76/18
76x76	Two-Part	751-1000	112.5°	100	100	1090	565	155	PS76/19
102x76	Two-Part	150-400	112.5°	100	100	485	317	155	PS43/17
102x76	Two-Part	401-750	112.5°	100	100	840	462	155	PS43/18
102x76	Two-Part	751-1000	112.5°	100	100	1090	565	155	PS43/19
102x102	Two-Part	150-400	112.5°	100	100	485	317	155	PS102/17
102x102	Two-Part	401-750	112.5°	100	100	840	462	155	PS102/18
102x102	Two-Part	751-1000	112.5°	100	100	1090	565	155	PS102/19
152x152	Two-Part	150-400	112.5°	100	100	485	334	168	PS152/17
152x152	Two-Part	401-750	112.5°	100	100	840	512.5	195	PS152/18
152x152	Two-Part	751-1000	112.5°	100	100	1090	582	168	PS152/19



PSO1 — Cast non-eared collar square two-part offset



PSO2 — Fabricated collar square two-part offset



PSDB4 — Fabricated collar rectangular two-part offset

PSO3 — Cast non-eared collar rectangular two-part offset

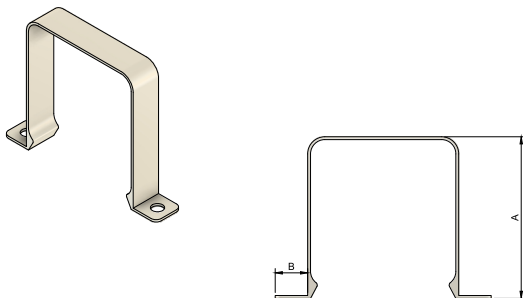
# Square & Rectangular Rainwater Pipe

## Brackets

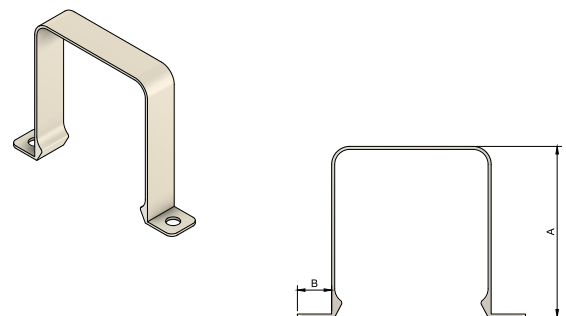
PIPE SIZE	TYPE	DIM A	DIM B	CODE PREFIX
76x76	Flush Fit	?	?	
76x76	Stand-Off	?	?	
102x76	Flush Fit	83.5	27	
102x76	Stand-Off	103	27	
102x102	Flush Fit	102	21	
102x102	Stand-Off	135	21	
152x152	Flush Fit	?	?	
152x152	Stand-Off	?	?	

### Key Features

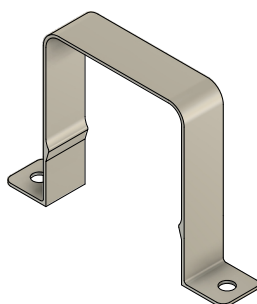
- ✓ Robust pipe support systems available in flush-fit, stand-off and two-part configurations to suit various installation requirements
- ⚠ Recommended installation at 1.5-metre intervals for standard downpipes, with cast-ear pipes requiring one clip per 3-metre length
- ✓ Manufactured from high-grade aluminium with concealed fixings available for security applications



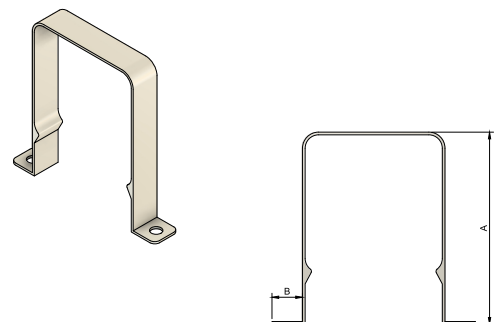
PSB4 — Flush fit bracket for rectangular rainwater pipe



PSB1 — Flush fit bracket for square rainwater pipe



PSB5 — 30mm stand-off bracket for rectangular rainwater pipe

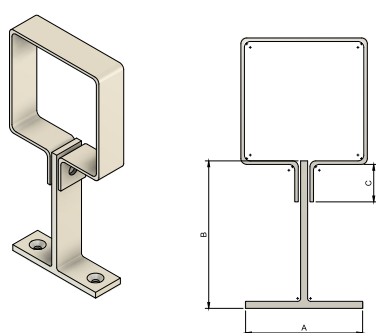


PSB2 — 30mm stand-off bracket for square rainwater pipe

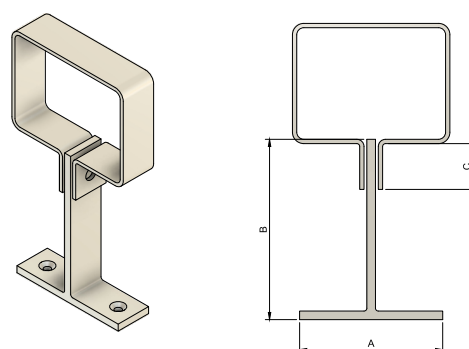
# Square & Rectangular Rainwater Pipe

## Brackets (continued)

PIPE SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
76x76	Two-Part Variable	100	125	30	
102x76	Two-Part Variable	100	125	30	
102x102	Two-Part Variable	100	125	30	
152x152	Two-Part Variable	100	125	30	



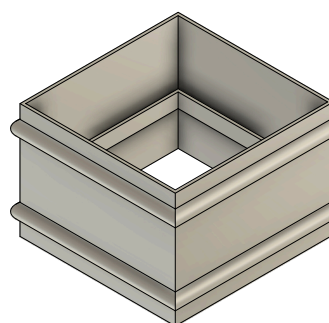
PSB3 — 2-part variable bracket for square rainwater pipe



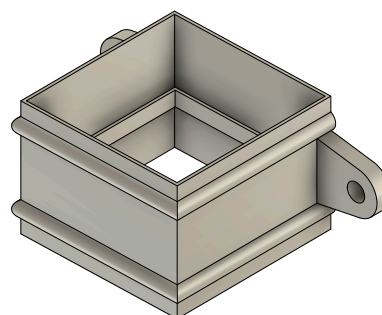
PSB6 — 2-part variable bracket for rectangular rainwater pipe

## Loose Collars

PIPE SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
76x76	Cast Collar	?	?		
76x76	Cast Eared Collar	?	?	?	
102x76	Cast Collar	80	110		
102x76	Cast Eared Collar	80	110	190	
102x102	Cast Collar	80	110		
102x102	Cast Eared Collar	80	110	191	
152x152	Cast Collar	?	?		
152x152	Cast Eared Collar	?	?	?	



PSC1 — Loose cast non-eared collar for square rainwater pipe



PSC2 — Loose cast eared collar for square rainwater pipe

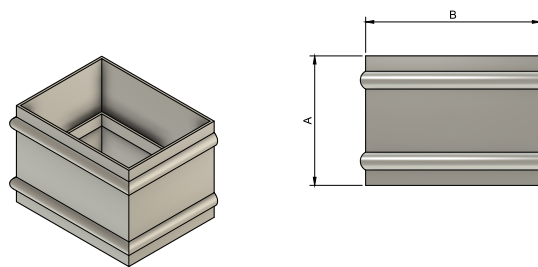


# Square & Rectangular Rainwater Pipe

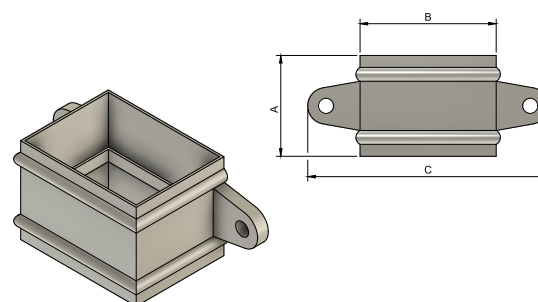
## Loose Collars (continued)

### Key Features

- ✓ Decorative pipe fittings available in die-cast aluminium (with or without traditional lugs) or swaged aluminium designs
- ✓ Enhances rainwater systems with authentic period charm while providing additional support at pipe joints
- ✓ Compatible with all standard Stormguard pipe profiles and available in matching powder-coated finishes for a cohesive appearance



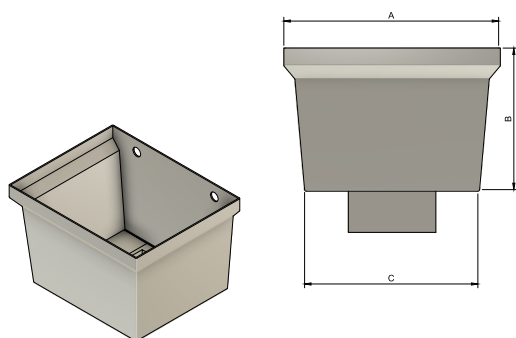
PSC3 — Loose cast non-eared collar for square rainwater pipe



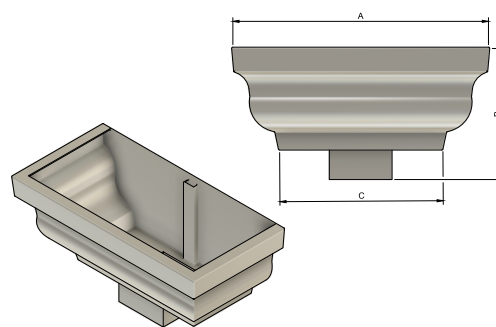
PSC4 — Loose cast eared collar for rectangular rainwater pipe

## Hopper Heads

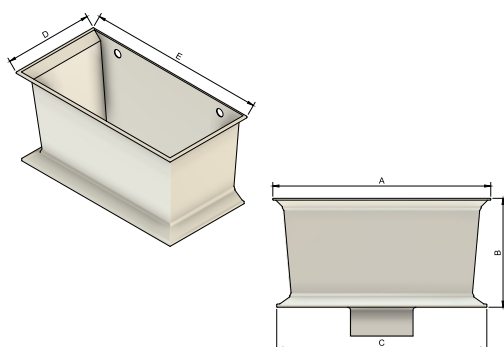
TYPE	DIM A	DIM B	DIM C	DIM D	DIM E	CODE SUFFIX
Universal	255	177	205	180		
Augustus	401	150	240	195		
Cranford	375	175	355	186	395	



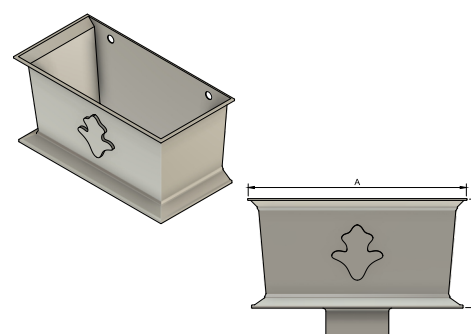
PSH1 — Universal hopper head to suit square rainwater pipe



PSH2 — Augustus hopper head to suit square rainwater pipe



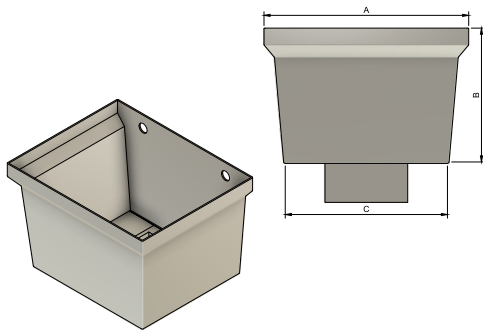
PSH3 — Cranford hopper head to suit square rainwater pipe



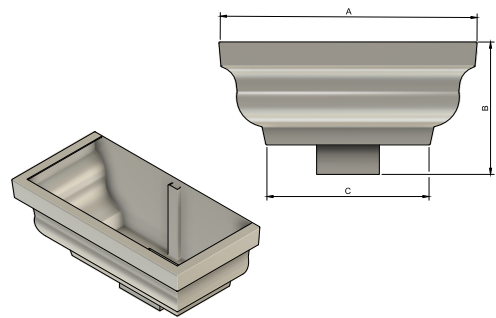
PSH4 — Cranford hopper head to suit square rainwater pipe with fleur de lis

# Square & Rectangular Rainwater Pipe

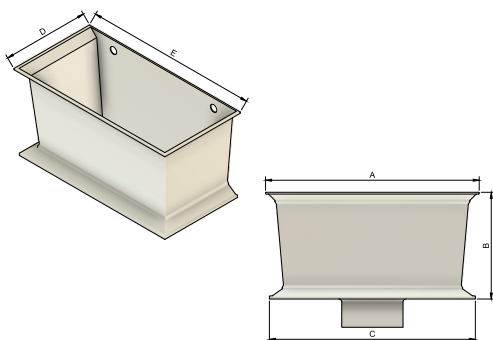
## Hopper Heads (continued)



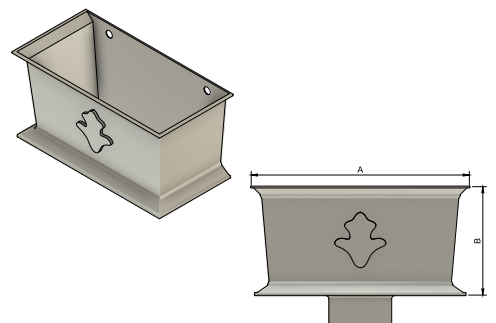
PSH5 — Universal hopper head to suit rectangular rainwater pipe



PSH6 — Augustus hopper head to suit rectangular rainwater pipe



PSH7 — Cranford hopper head to suit rectangular rainwater pipe



PSH8 — Cranford hopper head to suit rectangular rainwater pipe with fleur de lis

### Key Features

- ✓ Elegant collection vessels that direct water from gutters to downpipes while adding architectural interest to the building exterior
- ✓ Available in both cast aluminium (for traditional aesthetics with intricate detailing) and bespoke folded aluminium (for contemporary designs or specific size requirements)
- ✓ Many designs can be embellished with dates, emblems or decorative motifs for a truly personalised touch
- ✓ Available in mill finish or a wide range of polyester powder coatings to match specific colour requirements



### CONTACT US

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# TECHNICAL DATA SHEET



## SQUARE & RECTANGULAR SECURITY PIPE

Stormguard's square and rectangular security pipes deliver comprehensive anti-vandal protection through their distinctive flush-fitting design that eliminates climbing opportunities. Available in 75x75mm, 100x75mm and 100x100mm configurations, these profiles provide versatile sizing options for different drainage requirements while maintaining consistent security features. The concealed joint system and hidden fixings create smooth, uninterrupted surfaces that deny potential footholds, making them ideal for educational facilities, retail environments and other security-conscious applications.

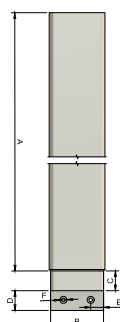


### Lengths

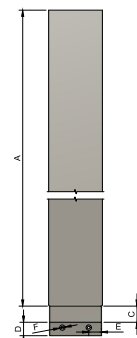
PIPE SIZE	PIPE LENGTH (A)	DIM B	DIM C	DIM D	DIM E	CODE PREFIX
75x75	2000	76?	50	30	76?	SPS3/3
75x75	1000	76?	50	30	76?	SPS3/4
75x75	500	76?	50	30	76?	SPS3/5
100x75	2000					SPS43/3
100x75	1000					SPS43/4
100x75	500					SPS43/5
100x100	2000	102?	50	30	102?	SPS4/3
100x100	1000	102?	50	30	102?	SPS4/4
100x100	500	102?	50	30	102?	SPS4/5

### Key Features

- ✓ Premium extruded aluminium square and rectangular security pipes available in 75x75mm, 100x75mm and 100x100mm anti-vandal configurations
- ✓ Manufactured from high-quality extruded aluminium tube with minimum 1.6mm wall gauge for exceptional strength and security performance
- ✓ Features distinctive flush-fitting design with concealed joints and fixings that create smooth, uninterrupted surfaces ideal for educational facilities and security-conscious applications



PSL1 — Length of square security pipe



PSL4 — Length of rectangular security pipe



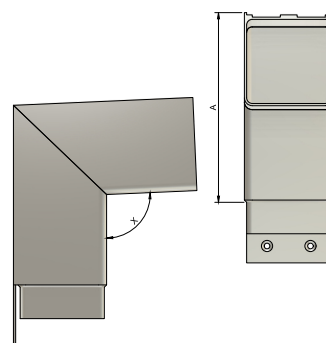
# Square & Rectangular Security Pipe

## 92.5° Bends

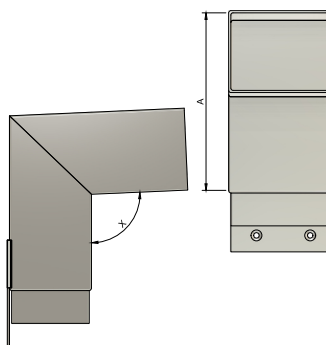
PIPE SIZE	ANGLE X (°)	DIM A	DIM B	CODE PREFIX
75x75	92.5	100	100	SPS3/6
100x75	92.5	100	100	SPS43/6
100x100	92.5	100	100	SPS4/6

### Key Features

- ✓ Precision-manufactured security pipe bends that maintain the flush-fitting anti-vandal design throughout directional changes in the drainage system
- ✓ Available in various angles to accommodate different building configurations while preserving the concealed joint system that denies potential footholds
- ✓ Compatible with all square and rectangular security pipe profiles for comprehensive tamper-resistant performance



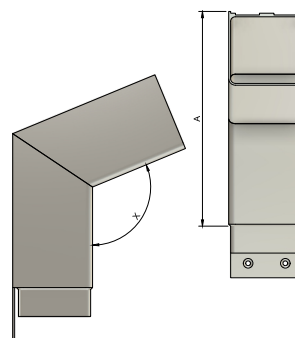
PSSB1 — 92.5° square security pipe bend



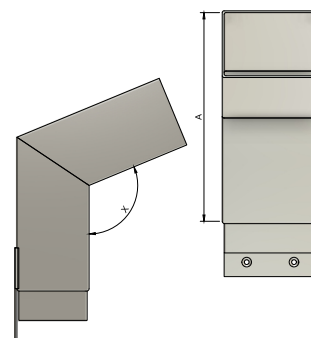
PSSB1 — 92.5° rectangular security pipe bend

## 112.5° Bends

PIPE SIZE	ANGLE X (°)	DIM A	DIM B	CODE PREFIX
75x75	112.5	100	100	SPS76/7
100x75	112.5	100	100	SPS43/7
100x100	112.5	100	100	SPS102/7



PSB4 — 112.5° square security pipe bend



PSB4 — 112.5° rectangular security pipe bend



### CONTACT US

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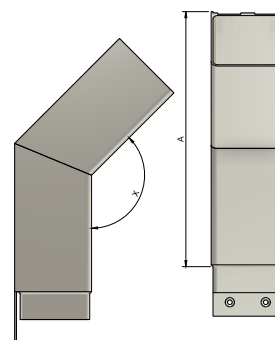
www.stormguardrainwater.co.uk

Augustus Mill, Buckley Street, Macclesfield SK11 6UH

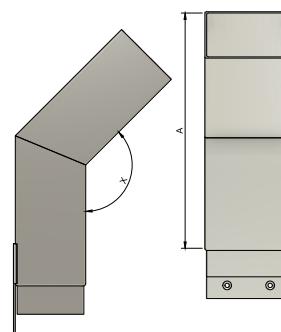
# Square & Rectangular Security Pipe

## 135° & Non-Standard Bends

PIPE SIZE	ANGLE X (°)	DIM A	DIM B	CODE PREFIX
75x75	135	100	100	SPS3/8
75x75	Non-Standard	100	100	SPS3/9
100x75	135	100	100	SPS43/8
100x75	Non-Standard	100	100	SPS43/9
100x100	135	100	100	SPS4/8
100x100	Non-Standard	100	100	SPS4/9



PSB7 — 135° square security pipe bend



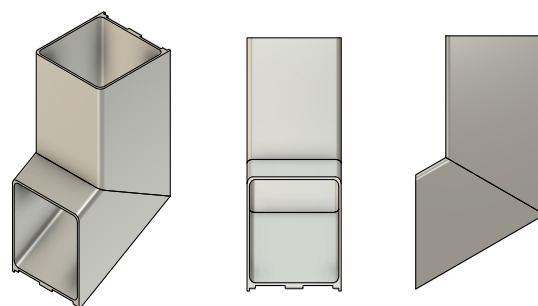
PSB1 — 135° rectangular security pipe bend

## Shoes

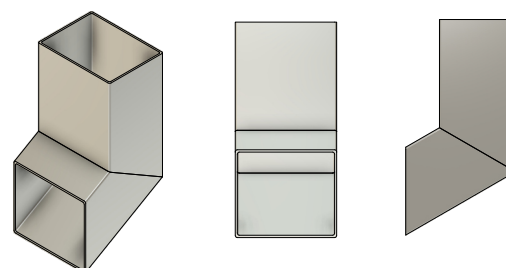
PIPE SIZE	DIM A	DIM B	DIM C	CODE PREFIX
75x75	216	100	30	PS76/10
100x75		100	30	PS43/10
100x100	265	100	30	PS102/10

### Key Features

- ✓ Anti-vandal outlet components specifically designed for square and rectangular security downpipes, providing secure water discharge while maintaining flush-fitting tamper-resistant characteristics
- ✓ Creates smooth, professional finish at ground level with concealed connections that deny climbing opportunities
- ✓ Effectively channels water away from building foundations while preserving the anti-vandal properties essential for educational facilities and security-conscious applications



PSS1 — Square security pipe shoe



PSS3 — Rectangular security pipe shoe

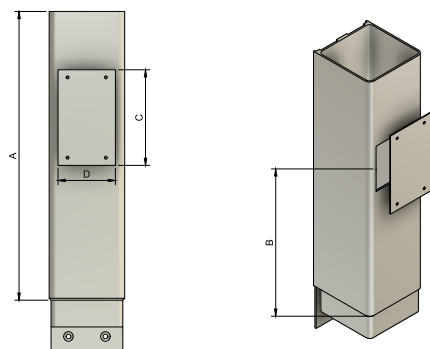
# Square & Rectangular Security Pipe

## Rodding Access Pipes

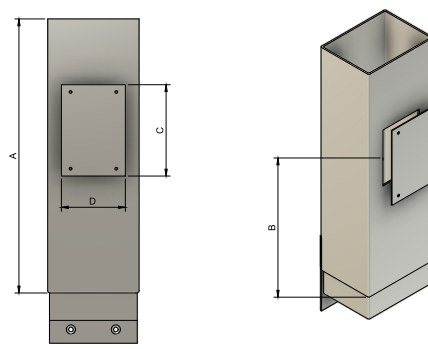
PIPE SIZE	DIM A	DIM B	DIM C	DIM D	CODE
75x75	350	150			SPS3/28
100x75	350	150			SPS43/28
100x100	350	150			SPS4/28

### Key Features

- ✓ Maintenance access components engineered for square and rectangular security pipe systems, providing inspection and cleaning capabilities without compromising anti-vandal performance
- ✓ Features concealed access design that enables system maintenance while preserving the flush-fitting characteristics that prevent unauthorised climbing
- ✓ Seamlessly integrates with security pipe profiles maintaining consistent tamper-resistant appearance throughout the drainage system



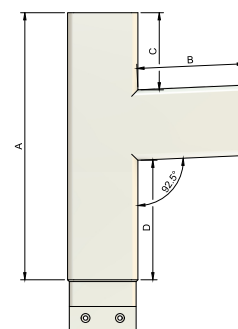
PSRA1 — Square rodding access security pipe



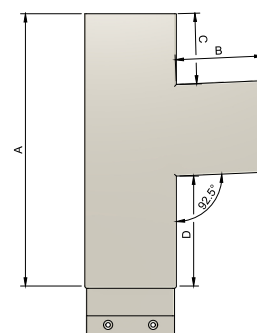
PSS5 — Rectangular rodding access security pipe

## Y Junctions

PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
75x75	92.5					
75x75	112.5					
75x75	135					
75x75	Non-Standard					
100x75	92.5					
100x75	112.5					
100x75	135					
100x75	Non-Standard					



PSY1 — 92.5° Y junction for square security pipe



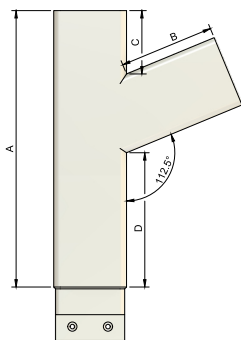
PSY3 — 92.5° Y junction for rectangular security pipe



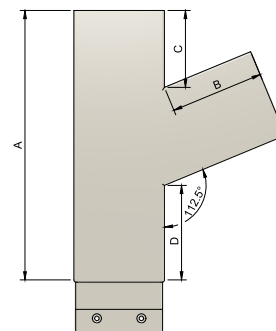
# Square & Rectangular Security Pipe

## Y Junctions (continued)

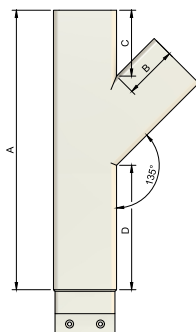
PIPE SIZE	ANGLE (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x100	92.5					
100x100	112.5					
100x100	135					
100x100	Non-Standard					



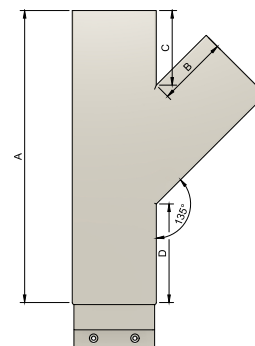
PSY5 — 112.5° Y junction for square security pipe



PSY6 — 112.5° Y junction for rectangular security pipe

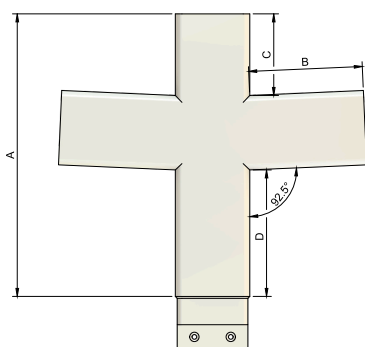


PSY7 — 135° Y junction for square security pipe

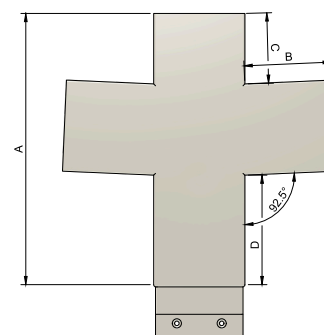


PSY8 — 135° Y junction for square security pipe

## Double Branches



PSDB1 — 92.5° double branch for square security pipe

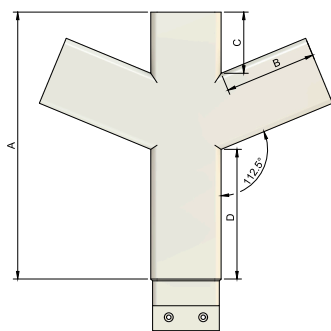


PSDB2 — 92.5° double branch for rectangular security pipe

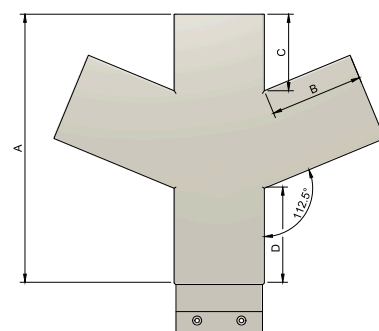
# Square & Rectangular Security Pipe

## Double Branches (continued)

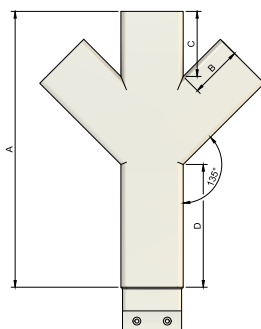
PIPE SIZE	ANGLE X (°)	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
75x75	92.5					
75x75	112.5					
75x75	135					
75x75	Non-Standard					
100x75	92.5					
100x75	112.5					
100x75	135					
100x75	Non-Standard					
100x100	92.5					
100x100	112.5					
100x100	135					
100x100	Non-Standard					



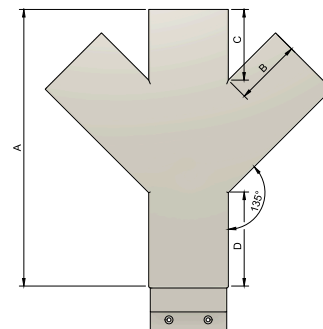
PSDB3 — 112.5° double branch for square security pipe



PSDB4 — 112.5° double branch for rectangular security pipe



PSDB5 — 135° double branch for square security pipe



PSDB5 — 135° double branch for rectangular security pipe

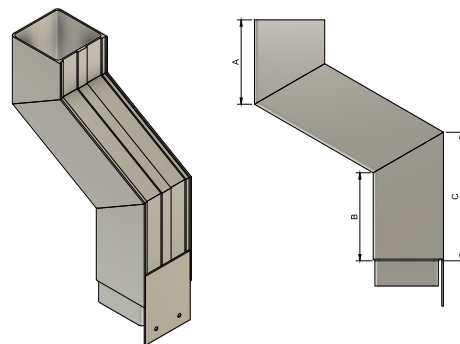
# Square & Rectangular Security Pipe

## One-Part Offsets

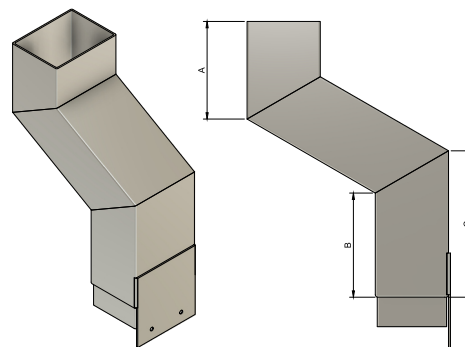
PIPE SIZE	TYPE	PROJECTION	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
75x75	One-Part	63-149	112.5°	159	100	160	SPS3/18
100x75	One-Part	63-149	112.5°				SPS43/18
100x100	One-Part	63-149	112.5°	185	100	190	SPS4/18

### Key Features

- ✓ Anti-vandal offset components for square and rectangular security pipes, designed to navigate building features while maintaining the smooth, flush-fitting security characteristics
- ✓ Available in various projection sizes with concealed joint systems that preserve the tamper-resistant properties essential for security applications
- ✓ Ensures consistent anti-vandal performance throughout complex drainage configurations



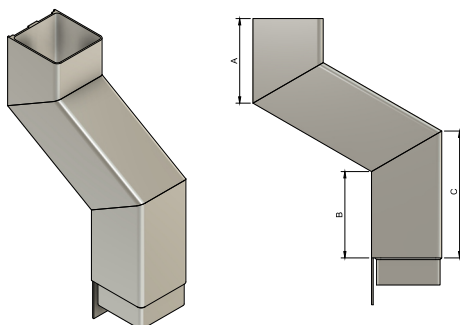
PSO1 — One-part offset for square security pipe



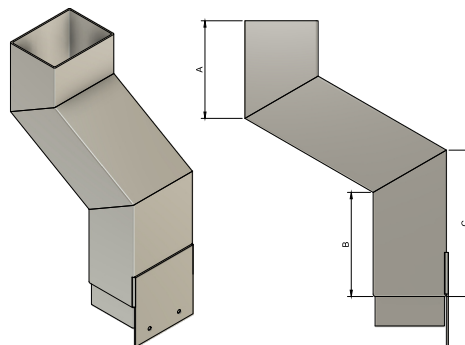
PSO3 — One-part offset for rectangular security pipe

## Plinth Offsets

PIPE SIZE	TYPE	PROJECTION	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
75x75	Plinth	63-149	112.5°	100	100	159	PS76/20
100x75	Plinth	63-149	112.5°				PS43/16
100x100	Plinth	63-149	112.5°	100	100	185	PS102/16



PSO1 — Plinth offset for square security pipe



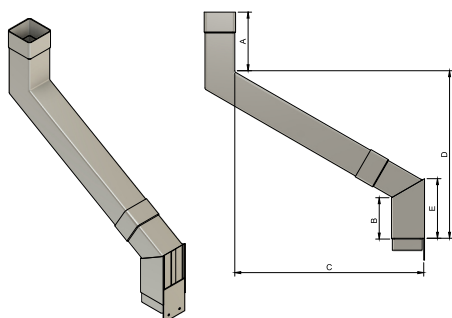
PSO3 — Plinth offset for rectangular security pipe



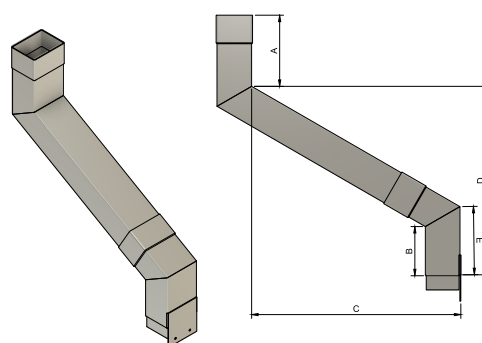
# Square & Rectangular Security Pipe

## Two-Part Offsets

PIPE SIZE	TYPE	PROJECTION	ANGLE X (°)	DIM A	DIM B	DIM C	DIM D	DIM E	CODE PREFIX
75x75	Two-Part	150-400	112.5°	100	100	485	308	160	PS76/23
75x75	Two-Part	401-750	112.5°	100	100	840	453	160	PS76/18
75x75	Two-Part	751-1000	112.5°	100	100	1090	556	160	PS76/19
100x75	Two-Part	150-400	112.5°	100	100	485			PS43/17
100x75	Two-Part	401-750	112.5°	100	100	840			PS43/18
100x75	Two-Part	751-1000	112.5°	100	100	1090			PS43/19
100x100	Two-Part	150-400	112.5°	100	100	485	317	190	PS102/17
100x100	Two-Part	401-750	112.5°	100	100	840	462	190	PS102/18
100x100	Two-Part	751-1000	112.5°	100	100	1090	565	190	PS102/19



PSO1 — Two-part offset for square security pipe



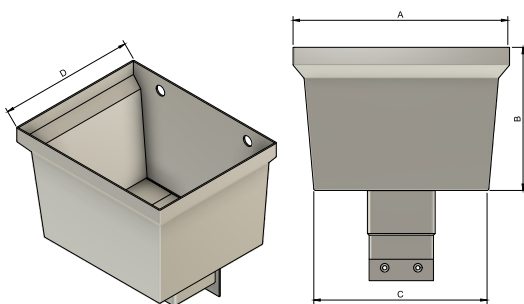
PSO3 — Two-part offset for rectangular security pipe



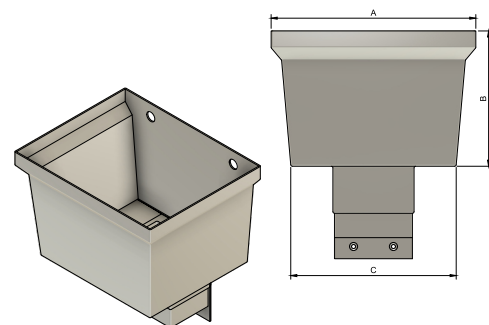
# Square & Rectangular Security Pipe

## Hopper Heads

PIPE SIZE	TYPE	DIM A	DIM B	DIM C	DIM D	DIM E	CODE
75x75	Universal	255	177	205	180		
100x75	Universal	255	177	205	180		
100x100	Universal	255	177	205	180		



PSH1 — Universal hopper head to suit square security pipe



PSH5 — Universal hopper head to suit rectangular security pipe

### Key Features

- ✓ Security-focused collection vessels designed for square and rectangular security pipe systems, combining water collection functionality with anti-vandal characteristics
- ✓ Features flush-fitting design with concealed connections that maintain the smooth, uninterrupted surfaces essential for climbing deterrence
- ✓ Directs water efficiently from gutters to security downpipes while preserving the tamper-resistant properties required for high-risk commercial and educational environments





A photograph of a two-story red brick house with a dark brown tiled roof. A white conservatory with a gabled roof and a semi-circular window is attached to the front. A large green plant is in the foreground, and a brick border separates a gravel area from a garden bed. A dark red banner with white text is overlaid on the left side of the image.

## Rainwater Gutters

Stormguard's extruded aluminium gutters provide a robust and versatile rainwater management solution suitable for various architectural styles and building types.





### MATERIAL & CONSTRUCTION

#### Material

Extruded from 6063 T6 aluminium alloy for superior strength and corrosion resistance. The high-grade aluminium alloy composition ensures exceptional dimensional stability and long-term structural integrity, even under extreme weather conditions and heavy water flow demands. The T6 temper designation indicates that the aluminium has been solution heat-treated and artificially aged, maximising its mechanical properties and providing optimal hardness for demanding applications.

#### Standard Lengths

Up to 3 metres in half-metre increments.

#### Construction Methods

Moulded Ogee and Beaded Half Round profiles employ sophisticated extrusion techniques that create seamless, high-strength sections with consistent wall thickness throughout. Box Gutter systems utilise precision pressed aluminium construction with a minimum 2mm gauge thickness, incorporating internal welded top straps in all profiles except the 4x3" box configuration. These structural reinforcements maintain the gutter's shape under load while providing a clean, streamlined external appearance that conceals support mechanisms from view.

### SYSTEM FEATURES

#### Versatile Installation Options

Compatible with fascia brackets or direct fixing, depending on profile choice.

#### Advanced Jointing Systems

Clip-Fit or Double-Sealed connections available depending on chosen profile.

#### High Capacity Performance

Box gutters can feature internal welded brackets for streamlined appearance and superior flow rates.

#### Traditional Aesthetics

Half Round profiles replicate classic cast iron appearance while offering modern performance.



#### CONTACT US

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ALUMINIUM RAINWATER SYSTEMS



## PROFILE SPECIFICATIONS

### Moulded Ogee

- Popular choice for residential and commercial applications
- High tensile strength enables flexible installation options
- Available with fascia bracket or direct fix mounting
- Bracket spacing: 750mm centres

### Beaded Half Round

- Authentic cast iron appearance for heritage applications
- Ideal for domestic homes and smaller commercial buildings



- Requires purpose-made extruded aluminium fascia brackets
- Bracket spacing: 600-750mm centres

### Stormguard Box Gutter


- Designed for high-capacity rainwater management
- Suitable for residential, commercial and industrial applications
- Internal welded brackets provide clean, streamlined appearance
- Superior flow capacity for demanding applications

## SYSTEM TESTING

- Blank off all gutter outlets
- Fill gutter to overflow level and leave for 5 minutes
- Check for leakage at all joints and connections
- Discharge water into rainwater pipes to test pipe joints
- Reseal and retest any leaking joints

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ALUMINIUM RAINWATER SYSTEMS

## PRODUCT INFORMATION

**PRODUCT NAME**  
RAINWATER GUTTER

**PRODUCT CODE PREFIX**  
BDR / BG / BHR / MO

**PRODUCT CATEGORY**  
ARCHITECTURAL ALUMINIUM



## MAINTENANCE

### Regular Inspection

Conduct comprehensive systematic inspections of the entire gutter system to thoroughly check proper alignment along the roofline, verify that all bracket connections remain securely fastened to the fascia or rafter mounting points, and assess the structural and watertight integrity of all joints including corners, outlets and stop ends.

### Cleaning

Systematically remove all accumulated debris from the entire gutter system, while simultaneously conducting thorough checks for blockages in outlets, downpipe connections and internal drainage pathways that could impede proper water flow and cause overflow conditions.

### Sealant & Joint Inspection

Systematically verify that all gutter support brackets including fascia brackets, rafter brackets and rise-and-fall brackets remain securely fixed to their mounting surfaces with no signs of loosening, corrosion or structural movement that could compromise the gutter's stability or proper positioning relative to the roof edge, while simultaneously conducting careful inspection of all silicone sealant applications at gutter joints, corner connections and outlet interfaces for signs of deterioration, shrinkage or adhesion failure.

## ADDITIONAL CONSIDERATIONS

### Flow Calculations

Consult the comprehensive technical flow charts and capacity tables provided in Stormguard's technical documentation to determine proper system sizing based on effective roof area calculations.

### Outlet Placement

Position gutter outlets strategically throughout the system to achieve optimal hydraulic performance by ensuring that the distance between stop ends and outlets does not exceed 50 times the gutter depth, while maintaining that the distance between individual outlets does not exceed 100 times the gutter depth as specified in BS EN 12056-3.

### Expansion Joints

3mm gap at all joints essential for maintaining system integrity across temperature variations.



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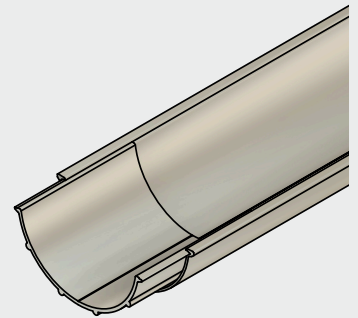
# TECHNICAL DATA SHEET



## BEADED HALF ROUND GUTTER

Half Round Beaded profiles are normally specified for domestic dwelling replacements as well as smaller commercial buildings. The profiles are an exact replica of the traditional cast iron systems that are still providing service across the UK to this day.

All Half Round and Deep Round systems must be installed in conjunction with the purpose made extruded aluminium fascia brackets, which should be between 750mm to 600mm centres. Direct fix is not possible with these profiles.



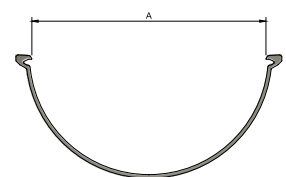
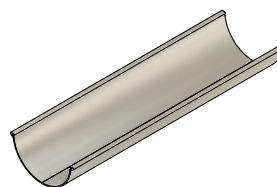
## Lengths

GUTTER SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
112	108	127	3000	52	BHR4
125	128	145	3000	69	BHR5
150	180	149	3000	80	BHR6
125x100 (Deep Flow)	128	158	3000	105	BDR

GUTTER LENGTH	CODE SUFFIX
3000	01
2500	02
2000	03
1500	03A
1000	04
500	05

### Key Features

- ✓ Premium extruded aluminium gutter lengths available in various profiles, manufactured from high-grade 6063 T6 aluminium alloy for superior strength and corrosion resistance
- ✓ Standard lengths up to 3 metres in half-metre increments
- ✓ Features low weight and high strength for simple, cost-effective installation with minimal stress on roofline structures



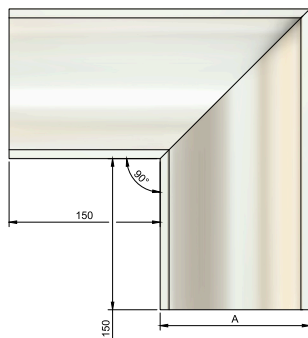
HRL1 — Length of half round gutter



# Beaded Half Round Gutter

## 90° Corners

GUTTER SIZE	TYPE	ANGLE X (°)	DIM A	DIM B	CODE PREFIX
112	Universal	90	150	278	BHR4/6
125	Universal	90	150	302	BHR5/6
150	Universal	90	150	334	BHR6/6
125x100 (Deep Flow)	Universal	90	150	308	BDR/6



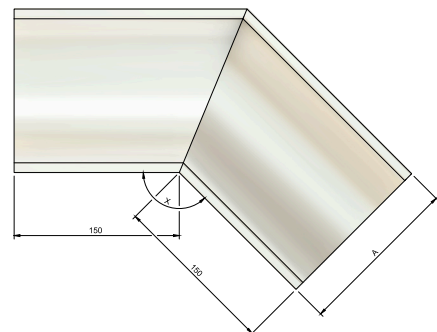
HRC1 — 90° corner for half round gutter

### Key Features

- ✓ Factory-fabricated and welded corner units available in standard 90°, 135° and custom non-standard angles to meet specific requirements
- ✓ Precision-engineered for perfect alignment with straight gutter sections
- ✓ Ensures watertight performance at directional changes while maintaining aesthetic consistency around the entire building perimeter

## 135° & Non-Standard Corners

GUTTER SIZE	TYPE	ANGLE X (°)	DIM A	DIM B	CODE PREFIX
112	Universal	135	150	207	BHR4/8
112	Universal	Non-Standard	150		BHR4/10
125	Universal	135	150	212	BHR5/8
125	Universal	Non-Standard	150		BHR5/10
150	Universal	135	150	225	BHR6/8
150	Universal	Non-Standard	150		BHR6/10
125x100 (Deep Flow)	Universal	135	150	215	BDR/8
125x100 (Deep Flow)	Universal	Non-Standard	150		BDR/10



HRC2 — 135° corner for half round gutter



### CONTACT US

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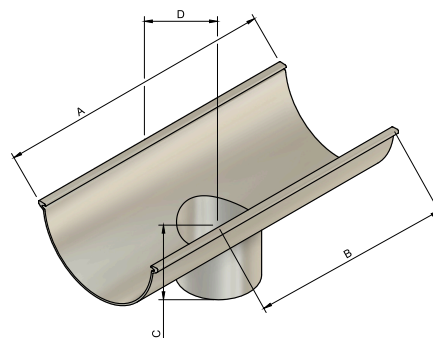
📍 Augustus Mill, Buckley Street, Macclesfield SK11 6UH

# Beaded Half Round Gutter

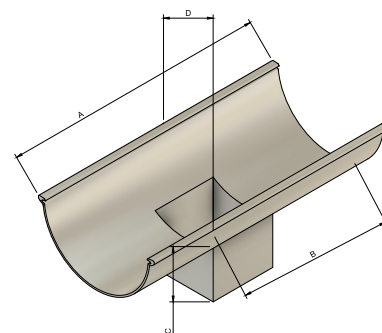
## Outlets

GUTTER SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
112	300	150	60	64	BHR4
125	300	150	60	72.5	BHR5
150	300	150	60	79	BHR6
125x100 (Deep Flow)	300	150	60	79	BDR

PIPE SIZE	CODE SUFFIX
63Ø	11
76Ø	12
102Ø	13
76x76	14
102x76	15
102x102	16



HRO1 — Half round gutter outlet to suit round rainwater pipe



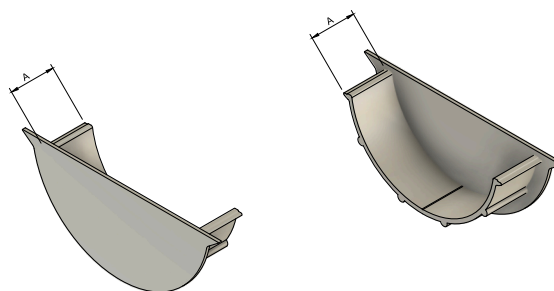
HRO2 — Half round gutter outlet to suit round rainwater pipe

### Key Features

- ✓ Engineered drainage outlets that efficiently channel water from gutters to downpipes
- ✓ Designed for optimal flow capacity to prevent overflow
- ✓ Flow capacity varies by outlet type and pipe size, with circular outlets available for 63mm, 76mm, 102mm and 150mm pipes, and square/rectangular options for 76x76mm, 76x102mm, and 102x102mm configurations
- ✓ Seamlessly integrates with the complete Stormguard aluminium rainwater system

## Stop Ends

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE
112	Universal	30	52	128	BHR4/17
125	Universal	30	62	147	BHR5/17
150	Universal	30	80	181	BHR6/17
125x100 (Deep Flow)	Universal	30	105	159	BDR/17



HRS1 — Half round gutter stopend

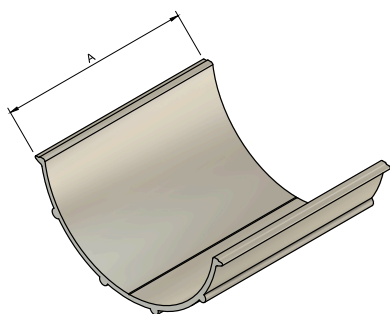
### Key Features

- ✓ Watertight end caps that seal gutter terminals, preventing water leakage at termination points
- ✓ Available for left and right applications across all gutter profiles
- ✓ Designed for durability and perfect integration with the main gutter system

# Beaded Half Round Gutter

## Joining Clips

GUTTER SIZE	DIM A	CODE
112	100	BHR4/22
125	100	BHR5/22
150	100	BHR6/22
125x100 (Deep Flow)	100	BDR/22



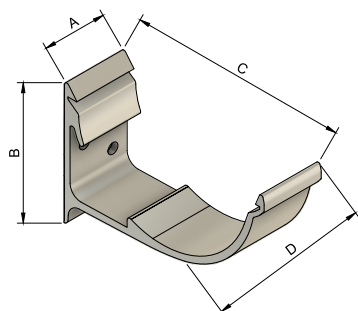
HRJ1 — Half round gutter joining clip

### Key Features

- ✓ Advanced sealing system designed to provide watertight connections at gutter joints
- ✓ Half-round profiles utilise internal joining clips as standard, maintaining a clean exterior appearance while ensuring reliable performance
- ✓ Both systems incorporate silicone sealant application in specific patterns for optimal waterproofing
- ✓ All clips maintain a crucial 3mm expansion gap between profiles to accommodate thermal movement while preventing water ingress

## Fascia Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE
112	Fascia Bracket	135	40	82	BHR4/18
125	Fascia Bracket	155	40	92	BHR5/18
150	Fascia Bracket	190	40	112	BHR6/18
125x100 (Deep Flow)	Fascia Bracket	166	40	125	BDR/18



HRB1 — Half round gutter fascia bracket

### Key Features

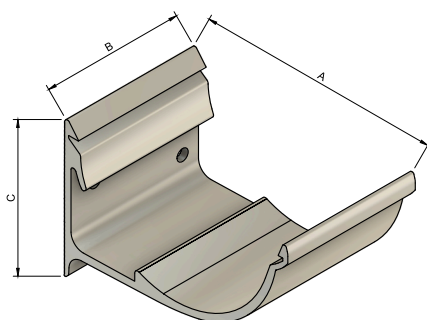
- ✓ High-performance mounting brackets designed for direct attachment to fascia boards
- ✓ Compatible with all gutter profiles, providing reliable support at 750mm centres
- ✓ Engineered for straightforward installation while maintaining structural integrity
- ✓ Available in mill finish or powder-coated options to match gutter system aesthetics



# Beaded Half Round Gutter

## Double-Strength Fascia Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE
112	Fascia Bracket (Double-Strength)	135	80	82	BHR4/18B
125	Fascia Bracket (Double-Strength)	155	80	92	BHR5/18B
150	Fascia Bracket (Double-Strength)	190	80	112	BHR6/18B
125x100 (Deep Flow)	Fascia Bracket (Double-Strength)	166	80	125	BDR/18B



HRB2 — Half round gutter double-strength fascia bracket

### Key Features

- ✓ Heavy-duty brackets specifically designed for half-round gutters requiring enhanced support
- ✓ Features reinforced construction for areas subject to higher loads or wider spacing requirements
- ✓ Provides exceptional strength while maintaining elegant appearance

## King Brackets (with Tudor Rose)

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
112	King Bracket				BHR4/18
125	King Bracket				
150	King Bracket				
125x100 (Deep Flow)	King Bracket				

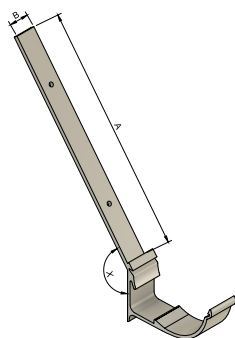
### Key Features

- ✓ Premium double-strength brackets enhanced with decorative rose detailing for half-round gutters
- ✓ Combines superior load-bearing capacity with traditional architectural styling
- ✓ Particularly suited to heritage and conservation projects
- ✓ Available in matching powder-coated finishes for complete visual harmony

# Beaded Half Round Gutter

## Top-Fix Rafter Brackets

GUTTER SIZE	TYPE	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
112	Rafter Bracket (Top Fix)		135	300	82	BHR4/19
125	Rafter Bracket (Top Fix)					BHR5/19
150	Rafter Bracket (Top Fix)					BHR6/19
125x100 (Deep Flow)	Rafter Bracket (Top Fix)		125	300	165	BDR/19



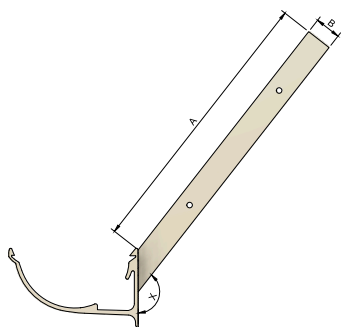
HRB4 — Half round gutter top-fix rafter bracket

### Key Features

- ✓ Versatile mounting brackets designed for installation directly onto exposed rafters from above
- ✓ Available for all gutter profiles, providing flexible positioning options
- ✓ Ideal for situations where fascia mounting is unsuitable or where traditional installation methods are preferred
- ✓ Maintains secure gutter alignment while allowing for roof structure variations

## Side-Fix Rafter Brackets

GUTTER SIZE	TYPE	ANGLE X (°)	DIM A	DIM B	DIM C	CODE PREFIX
112	Rafter Bracket (Side Fix)					BHR4/20
125	Rafter Bracket (Side Fix)					BHR5/20
150	Rafter Bracket (Side Fix)					BHR6/20
125x100 (Deep Flow)	Rafter Bracket (Side Fix)		125	300	165	BDR/20



HRB5 — Half round gutter side-fix rafter bracket

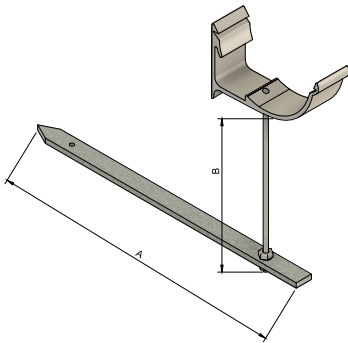
### Key Features

- ✓ Alternative rafter mounting option featuring lateral attachment to vertical rafter faces
- ✓ Suitable for all gutter profiles where top-fix installation is impractical
- ✓ Provides stable support while accommodating different rafter configurations
- ✓ Ensures proper gutter positioning relative to roof edge for optimal water collection

# Beaded Half Round Gutter

## Rise & Fall Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	CODE PREFIX
112	Rise & Fall Bracket	337	200	BHR4/21
125	Rise & Fall Bracket	337	200	BHR5/21
150	Rise & Fall Bracket	337	200	BHR6/21
125x100 (Deep Flow)	Rise & Fall Bracket			BDR/21



HRB6 — Half round gutter rise & fall bracket

### Key Features

- ✓ Adjustable brackets offering variable height positioning for precise gutter alignment
- ✓ Compatible with all gutter profiles, enabling fine-tuning of fall rates for optimal drainage
- ✓ Essential for achieving correct installation levels across extended runs
- ✓ Compensates for uneven fascia boards or structural variations while maintaining professional appearance

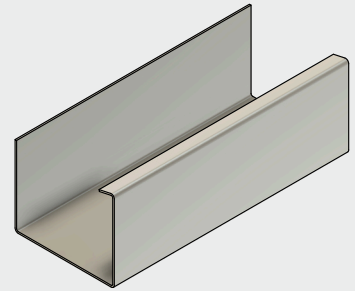


# TECHNICAL DATA SHEET



## ECLIPSE BOX GUTTER

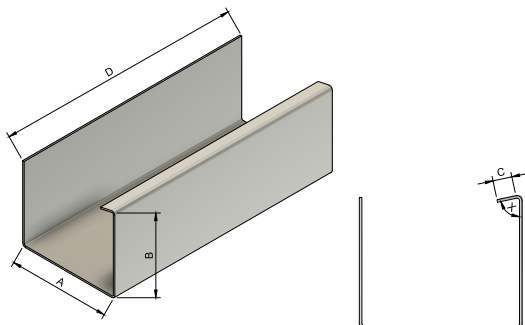
The standard box gutter is one of the most cost effective systems to contain and discharge large volumes of rainwater from any domestic, commercial or industrial building. Eclipse box gutter systems are pressed from aluminium sheet with a minimum gauge of 2mm and are supplied in standard lengths. The majority of specifiers opt for a double-sealed system with bracket placed at 600mm centres.



## Lengths

GUTTER SIZE	DIM A	DIM B	DIM C	ANGLE X (°)	CODE PREFIX
100x75	100	75	20	?	BG43
125x100	125	100	20	?	BG54
150x100	150	100	20		BG64
150x150	150	150	20		BG66
200x150	200	150	20		BG86

GUTTER LENGTH (D)	CODE SUFFIX
3000	01
2500	02
2000	03
1500	03A
1000	04
500	05



BGL1 — Length of box gutter

## Key Features

- ✓ Premium extruded aluminium gutter lengths available in various profiles, manufactured from high-grade 6063 T6 aluminium alloy for superior strength and corrosion resistance
- ✓ Standard lengths up to 3 metres in half-metre increments
- ✓ Features low weight and high strength for simple, cost-effective installation with minimal stress on roofline structures

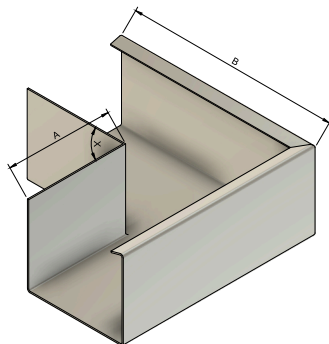
# Eclipse Box Gutter

## 90° Corners

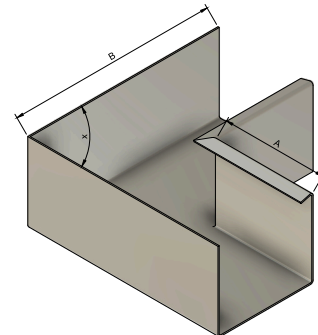
GUTTER SIZE	TYPE	DIM A	DIM B	ANGLE X (°)	CODE
100x75	External	150	253	90	BG43/06
100x75	Internal	150	253	90	BG43/07
125x100	External	150	298	90	BG54/06
125x100	Internal	150	298	90	BG54/07
150x100	External	150	298	90	BG64/06
150x100	Internal	150	298	90	BG64/07
150x150	External	150	304	90	BG66/06
150x150	Internal	150	304	90	BG66/07
200x150	External	150	360	90	BG86/06
200x150	Internal	150	360	90	BG86/07

### Key Features

- ✓ Factory-fabricated and welded corner units available in standard 90°, 135° and custom non-standard angles to meet specific requirements
- ✓ Precision-engineered for perfect alignment with straight gutter sections
- ✓ Ensures watertight performance at directional changes while maintaining aesthetic consistency around the entire building perimeter



BGC1 — 90° external corner of box gutter



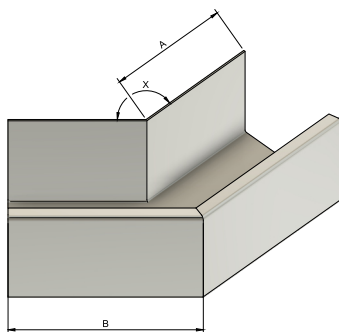
BGC2 — 90° internal corner of box gutter



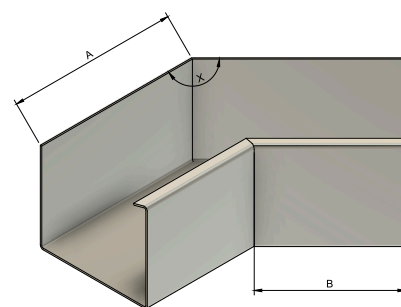
# Eclipse Box Gutter

## 135° & Non-Standard Corners

GUTTER SIZE	TYPE	DIM A	DIM B	ANGLE X (°)	CODE PREFIX
100x75	External	150	201	135	BG43/8
100x75	Internal	150	201	135	BG43/9
100x75	External	150	Variable	Non-Standard	BG43/10E
100x75	Internal	150	Variable	Non-Standard	BG43/10I
125x100	External	150	203	135	BG54/8
125x100	Internal	150	203	135	BG54/9
125x100	External	150	Variable	Non-Standard	BG54/10E
125x100	Internal	150	Variable	Non-Standard	BG54/10I
150x100	External	150	213	135	BG64/8
150x100	Internal	150	213	135	BG64/9
150x100	External	150	Variable	Non-Standard	BG64/10E
150x100	Internal	150	Variable	Non-Standard	BG64/10I
150x150	External	150	213	135	BG66/8
150x150	Internal	150	213	135	BG66/9
150x150	External	150	Variable	Non-Standard	BG66/10E
150x150	Internal	150	Variable	Non-Standard	BG66/10I
200x150	External	150	227	135	BG86/8
200x150	Internal	150	227	135	BG86/9
200x150	External	150	Variable	Non-Standard	BG86/10E
200x150	Internal	150	Variable	Non-Standard	BG86/10I



BGC3 — 135° external corner of box gutter



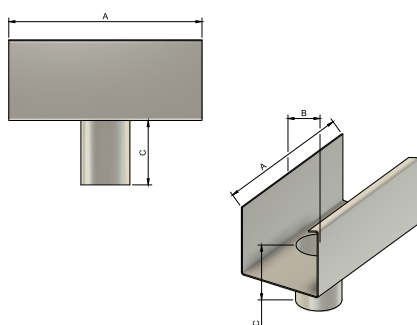
BGC4 — 135° internal corner of box gutter



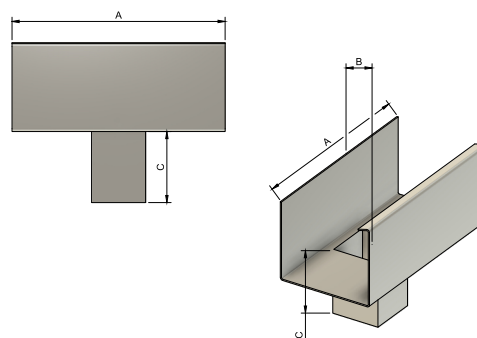
# Eclipse Box Gutter

## Outlets

GUTTER SIZE	PIPE SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x75	63Ø	300	150	60	46.5	BG43/11
100x75	76Ø	300	150	60	53	BG43/12
100x75	76x76	300	150	60	53	BG43/14
100x75	102x76	300	150	60	53	BG43/15
125x100	63Ø	300	V	60		BG54/11
125x100	76Ø	300	V	60		BG54/12
125x100	76x76	300	V	60		BG54/14
125x100	102x102	300	V	61		BG54/15
150x100	63Ø	300	V	60		BG64/11
150x100	76Ø	300	V	60		BG64/12
150x100	76x76	300	V	60		BG64/14
150x100	102x102	300	V	61		BG64/15
150x150	63Ø	300	150	60	46.5	BG66/11
150x150	76Ø	300	150	60	53	BG66/12
150x150	102Ø	300	150	60	66	BG66/13
150x150	152Ø	300	150	61	91	BG66/13A
150x150	76x76	300	150	60	53	BG66/14
150x150	102x76	300	150	60	53	BG66/15
150x150	102x102	300	150	60	66	BG66/16



BGO1 — Box gutter outlet to suit round rainwater pipe

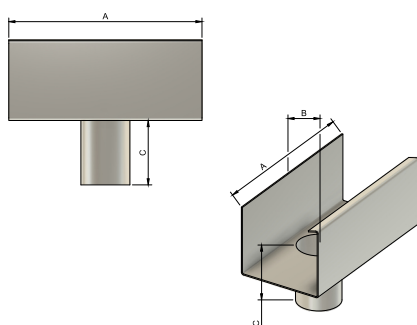


BGO2 — Box gutter outlet to suit square/rectangular rainwater pipe

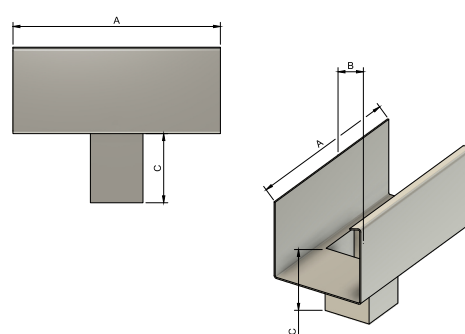
# Eclipse Box Gutter

## Outlets

GUTTER SIZE	PIPE SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x75	63Ø	300	150	60	46.5	BG43/11
100x75	76Ø	300	150	60	53	BG43/12
100x75	76x76	300	150	60	53	BG43/14
100x75	102x76	300	150	60	53	BG43/15
125x100	63Ø	300	V	60		BG54/11
125x100	76Ø	300	V	60		BG54/12
125x100	76x76	300	V	60		BG54/14
125x100	102x102	300	V	61		BG54/15
150x100	63Ø	300	V	60		BG64/11
150x100	76Ø	300	V	60		BG64/12
150x100	76x76	300	V	60		BG64/14
150x100	102x102	300	V	61		BG64/15
150x150	63Ø	300	150	60	46.5	BG66/11
150x150	76Ø	300	150	60	53	BG66/12
150x150	102Ø	300	150	60	66	BG66/13
150x150	152Ø	300	150	61	91	BG66/13A
150x150	76x76	300	150	60	53	BG66/14
150x150	102x76	300	150	60	53	BG66/15
150x150	102x102	300	150	60	66	BG66/16



BGO1 — Box gutter outlet to suit round rainwater pipe



BGO2 — Box gutter outlet to suit square/rectangular rainwater pipe

# Eclipse Box Gutter

## Outlets (continued)

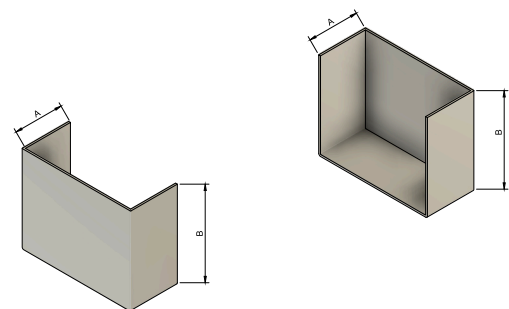
GUTTER SIZE	PIPE SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
200x150	63Ø	300	V	60		BG86/11
200x150	76Ø	300	V	60		BG86/12
200x150	102Ø	300	V	60		BG86/13
200x150	152Ø	300	V	61		BG86/13A
200x150	76x76	300	V	62		BG86/14
200x150	102x76	300	V	63		BG86/15
200x150	102x102	300	V	64		BG86/16

### Key Features

- ✓ Engineered drainage outlets that efficiently channel water from gutters to downpipes
- ✓ Designed for optimal flow capacity to prevent overflow
- ✓ Flow capacity varies by outlet type and pipe size, with circular outlets available for 63mm, 76mm, 102mm and 150mm pipes, and square/rectangular options for 76x76mm, 76x102mm, and 102x102mm configurations
- ✓ Seamlessly integrates with the complete Stormguard aluminium rainwater system

## Stop Ends

GUTTER SIZE	TYPE	DIM A	DIM B	CODE PREFIX
100x75	Universal	77	96	BG43/17
125x100	Universal	50	96	BG54/17
150x100	Universal	50	96	BG64/17
150x150	Universal	142	142	BG66/17
200x150	Universal	50	145	BG86/17



BGSE1 — Left- and right-hand box gutter stop ends

### Key Features

- ✓ Watertight end caps that seal gutter terminals, preventing water leakage at termination points
- ✓ Available for left and right applications across all gutter profiles
- ✓ Designed for durability and perfect integration with the main gutter system



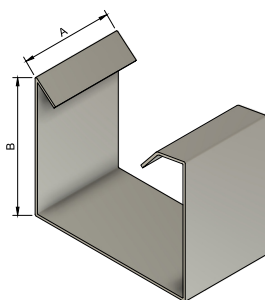
# Eclipse Box Gutter

## Joining Clips

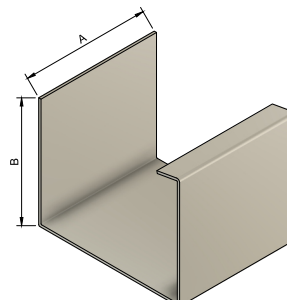
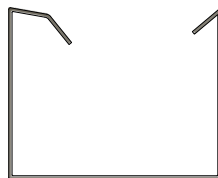
GUTTER SIZE	TYPE	DIM A	DIM B	CODE PREFIX
100x75	Internal	71	96	BG43/22
100x75	External	80	101	BG43/22E
125x100	Internal	100	97	BG54/22
125x100	External	70	106	BG54/22E
150x100	Internal	100	97	BG64/22
150x100	External	70	106	BG64/22E
150x150	Internal	146	146	BG66/22
150x150	External	157	157	BG66/22E
200x150	Internal	100	145	BG86/22
200x150	External	70	156	BG86/22E

### Key Features

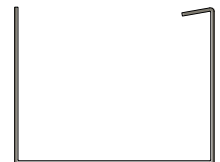
- ✓ Advanced sealing system designed to provide watertight connections at gutter joints
- ✓ Half-round profiles utilise internal joining clips as standard, maintaining a clean exterior appearance while ensuring reliable performance
- ✓ Both systems incorporate silicone sealant application in specific patterns for optimal waterproofing
- ✓ All clips maintain a crucial 3mm expansion gap between profiles to accommodate thermal movement while preventing water ingress



BGJC1 — External joining clip for box gutter

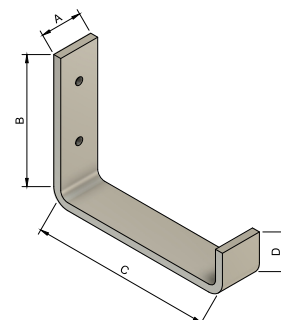


BGJC2 — Internal joining clip for box gutter



## Fascia Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x75	Fascia Bracket		81?	119?		BG43/18
125x100	Fascia Bracket	31	107	141	24	BG54/18
150x100	Fascia Bracket	31	107	168	24	BG64/18
150x150	Fascia Bracket		155?	166?		BG66/18
200x150	Fascia Bracket	31	150	218	35	BG86/18



BGB1 — Box gutter fascia bracket

# Eclipse Box Gutter

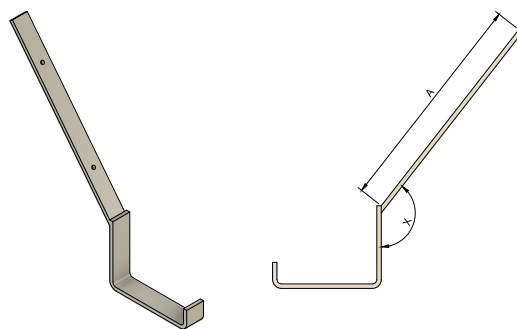
## Fascia Brackets (continued)

### Key Features

- ✓ High-performance mounting brackets designed for direct attachment to fascia boards
- ✓ Compatible with all gutter profiles, providing reliable support at 750mm centres
- ✓ Engineered for straightforward installation while maintaining structural integrity
- ✓ Available in mill finish or powder-coated options to match gutter system aesthetics

## Top-Fix Rafter Brackets

GUTTER SIZE	TYPE	DIM A	ANGLE X (°)	CODE PREFIX
100x75	Rafter Bracket (Top Fix)	300		BG43/19
125x100	Rafter Bracket (Top Fix)	300		BG54/19
150x100	Rafter Bracket (Top Fix)	300		BG64/19
150x150	Rafter Bracket (Top Fix)	300		BG66/19
200x150	Rafter Bracket (Top Fix)	300		BG86/19



BGB2 — Box gutter top-fix rafter bracket

### Key Features

- ✓ Versatile mounting brackets designed for installation directly onto exposed rafters from above
- ✓ Available for all gutter profiles, providing flexible positioning options
- ✓ Ideal for situations where fascia mounting is unsuitable or where traditional installation methods are preferred
- ✓ Maintains secure gutter alignment while allowing for roof structure variations

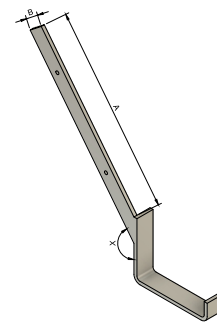
# Eclipse Box Gutter

## Side-Fix Rafter Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	ANGLE X (°)	CODE PREFIX
100x75	Rafter Bracket (Side Fix)	300	32		BG43/20
125x100	Rafter Bracket (Side Fix)	300	32		BG54/20
150x100	Rafter Bracket (Side Fix)	300	32		BG64/20
150x150	Rafter Bracket (Side Fix)	150?	300?		BG66/20
200x150	Rafter Bracket (Side Fix)	300	32		BG86/20

### Key Features

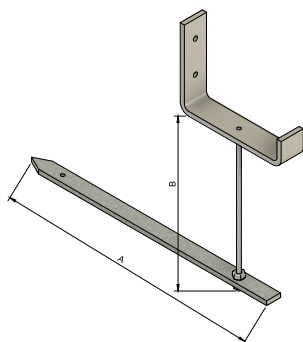
- ✓ Alternative rafter mounting option featuring lateral attachment to vertical rafter faces
- ✓ Suitable for all gutter profiles where top-fix installation is impractical
- ✓ Provides stable support while accommodating different rafter configurations
- ✓ Ensures proper gutter positioning relative to roof edge for optimal water collection



BGB3 — Box gutter side-fix rafter bracket

## Rise & Fall Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	CODE PREFIX
100x75	Rise & Fall Bracket	337	200	BG43/21
125x100	Rise & Fall Bracket	337	200	BG54/21
150x100	Rise & Fall Bracket	337	200	BG64/21
150x150	Rise & Fall Bracket	150?		BG66/21
200x150	Rise & Fall Bracket	337	200	BG86/21



BGB4 — Box gutter rise-and-fall bracket

### Key Features

- ✓ Adjustable brackets offering variable height positioning for precise gutter alignment
- ✓ Compatible with all gutter profiles, enabling fine-tuning of fall rates for optimal drainage
- ✓ Essential for achieving correct installation levels across extended runs
- ✓ Compensates for uneven fascia boards or structural variations while maintaining professional appearance

# Eclipse Box Gutter

## Raked Box Gutter

For architectural designs featuring angled fascias or sloped rooflines, Stormguard manufactures bespoke raked box gutters that incorporate an angled front face to complement the building's aesthetic while maintaining optimal water collection performance. Each raked gutter is custom-fabricated in-house using precision laser cutting and advanced folding techniques to achieve the specified rake angle, typically ranging from subtle 15° slopes to more pronounced 45° inclinations. The raked profile maintains the same robust 2mm minimum gauge construction and proven double-seal jointing system as our standard box gutters, with the angled front face expertly welded to ensure structural integrity and watertight performance. The raked design not only provides visual coherence with angled architectural elements, but also enhances water shedding capabilities by directing overflow away from the building facade. Perfect for contemporary buildings with angular rooflines, mansard roofs or any application where standard vertical-faced gutters would appear incongruous with the overall design intent.



## Radius Box Gutter

For projects requiring curved rainwater management solutions, Stormguard manufactures bespoke radius box gutters in-house using precision laser cutting and advanced folding machinery. Each radius gutter is custom-fabricated to exact project specifications, accommodating any curve from tight bends to gentle sweeping arcs while maintaining the same 2mm minimum gauge construction and double-seal jointing system as our standard box gutters. Expert welding ensures smooth, watertight curves that integrate seamlessly with straight gutter sections. Ideal for bay windows, circular towers and curved facades where conventional guttering cannot provide adequate coverage.

The fabrication process for radius gutters requires meticulous calculation of material development to ensure that curved sections maintain consistent depth and profile alignment throughout the arc. Our specialist technicians employ advanced CAD software to calculate precise bend allowances and stretching factors, accounting for the aluminium's material properties to prevent distortion or stress fractures. Each curved section undergoes rigorous quality inspection, ensuring that the finished product meets the same exacting standards as our standard straight profiles while delivering the architectural elegance that curved building elements demand.



# TECHNICAL DATA SHEET



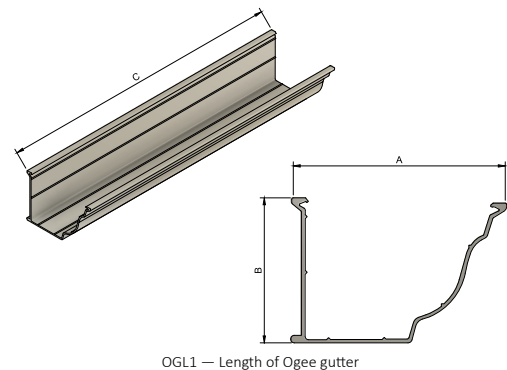
## MOULDED OGEE GUTTER

The Moulded Ogee profiles are extensively specified on all types of projects for both new and refurbishment schemes, from domestic dwellings to commercial office developments. The Ogee range commands a major share of the domestic, commercial and industrial rainwater systems market. Due to the high tensile alloy that is used in the manufacture of the extruded profiles, the Ogee system can be fixed either in the traditional format with external fascia brackets or through the back of the profile into the building fabric as a directly fixed system.



## Lengths

GUTTER SIZE	GUTTER LENGTH	DIM A	DIM B	DIM C	CODE PREFIX
100x75	3000	116	78	66	MO43/01
100x75	2500	116	78	66	MO43/02
100x75	2000	116	78	66	MO43/03
100x75	1500	116	78	66	MO43/03A
100x75	1000	116	78	66	MO43/04
100x75	500	116	78	66	MO43/05
125x100	3000	140	102	76	MO54/01
125x100	2500	140	102	76	MO54/02
125x100	2000	140	102	76	MO54/03
125x100	1500	140	102	76	MO54/03A
125x100	1000	140	102	76	MO54/04
125x100	500	140	102	76	MO54/05



### CONTACT US

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Augustus Mill, Buckley Street, Macclesfield SK11 6UH

# Moulded Ogee Gutter

## Lengths (continued)

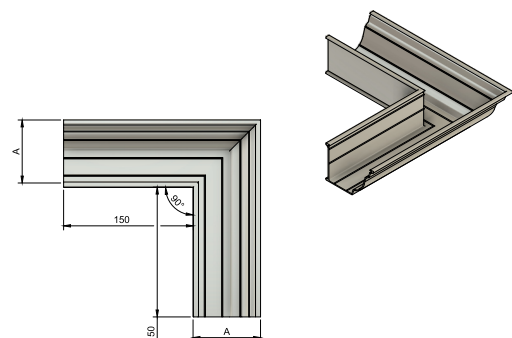
GUTTER SIZE	GUTTER LENGTH	DIM A	DIM B	DIM C	CODE PREFIX
150x100	3000	161	102	90	MO64/01
150x100	2500	161	102	90	MO64/02
150x100	2000	161	102	90	MO64/03
150x100	1500	161	102	90	MO64/03A
150x100	1000	161	102	90	MO64/04
150x100	500	161	102	90	MO64/05
200x150	3000	195	150	120	MO86/01
200x150	2500	195	150	120	MO86/02
200x150	2000	195	150	120	MO86/03
200x150	1500	195	150	120	MO86/03A
200x150	1000	195	150	120	MO86/04
200x150	500	195	150	120	MO86/05

### Key Features

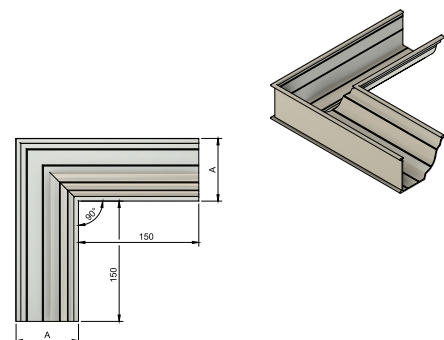
- ✓ Premium extruded aluminium gutter lengths available in various profiles, manufactured from high-grade 6063 T6 aluminium alloy for superior strength and corrosion resistance
- ✓ Standard lengths up to 3 metres in half-metre increments
- ✓ Features low weight and high strength for simple, cost-effective installation with minimal stress on roofline structures

## 90° Corners

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
100x75	External	116	226	66	MO43/06
100x75	Internal	116	226	66	MO43/07
125x100	External	140	290	76	MO54/06
125x100	Internal	140	290	76	MO54/07
150x100	External	161	311	90	MO64/06
150x100	Internal	161	311	90	MO64/07
200x150	External	195	345	120	MO86/06
200x150	Internal	195	345	120	MO86/07



OGC1 — 90° external corner of Ogee gutter



OGC2 — 90° internal corner of Ogee gutter

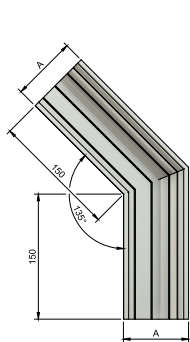
# Moulded Ogee Gutter

## 135° Corners

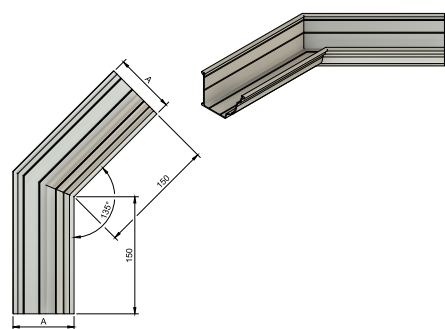
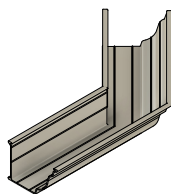
GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
100x75	External	116	195	66	MO43/08
100x75	Internal	116	195	66	MO43/09
125x100	External	140	207	76	MO54/08
125x100	Internal	140	207	76	MO54/09
150x100	External	161	220	90	MO64/08
150x100	Internal	161	220	90	MO64/09
200x150	External	150	227	120	MO86/08
200x150	Internal	150	227	120	MO86/09

### Key Features

- ✓ Factory-fabricated and welded corner units available in standard 90°, 135° and custom non-standard angles to meet specific requirements
- ✓ Precision-engineered for perfect alignment with straight gutter sections
- ✓ Ensures watertight performance at directional changes while maintaining aesthetic consistency around the entire building perimeter



OG3 — 135° external corner of Ogee gutter



OG4 — 135° internal corner of Ogee gutter

## Non-Standard Corners

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	CODE PREFIX
100x75	External				MO43/08
100x75	Internal				MO43/09
125x100	External				MO54/08
125x100	Internal				MO54/09
150x100	External				MO64/08
150x100	Internal				MO64/09
200x150	External				MO86/08
200x150	Internal				MO86/09

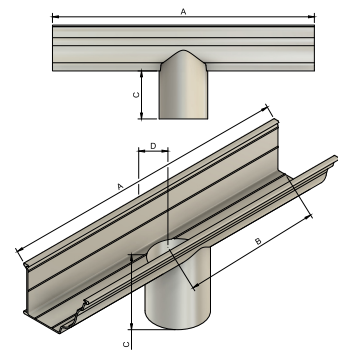
# Moulded Ogee Gutter

## Outlets

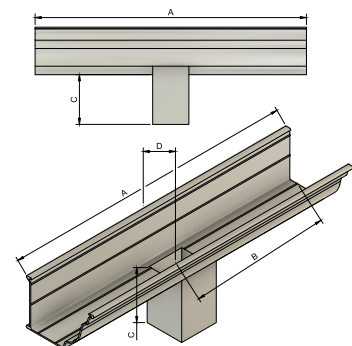
GUTTER SIZE	PIPE SIZE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x75	63Ø	300	150	60	46.5	MO43/11
100x75	76Ø	300	150	60	53	MO43/12
100x75	76x76	300	150	60	46.5	MO43/14
100x75	102x76	300	150	60	53	MO43/15
125x100	63Ø	300	150	60	46.5	MO54/11
125x100	76Ø	300	150	60	53	MO54/12
125x100	102Ø					MO54/13
125x100	76x76	300	150	60	46.5	MO54/14
125x100	102x76					MO54/15
125x100	102x102	300	150	60	53	MO54/16
150x100	63Ø	300	150	60	46.5	MO64/11
150x100	76Ø	300	150	60	53	MO64/12
150x100	102Ø					MO64/13
150x100	76x76	300	150	60	46.5	MO64/14
150x100	102x76					MO64/15
150x100	102x102	300	150	60	53	MO64/16
200x150	63Ø	300	150	60	46.5	MO86/11
200x150	76Ø	300	150	60	53	MO86/12
200x150	102Ø					MO86/13
200x150	76x76	300	150	60	46.5	MO86/14
200x150	102x76	300	150	60	53	MO86/15
200x150	102x102					MO86/16

### Key Features

- ✓ Engineered drainage outlets that efficiently channel water from gutters to downpipes
- ✓ Designed for optimal flow capacity to prevent overflow
- ✓ Flow capacity varies by outlet type and pipe size, with circular outlets available for 63mm, 76mm, 102mm and 150mm pipes, and square/rectangular options for 76x76mm, 76x102mm, and 102x102mm configurations
- ✓ Seamlessly integrates with the complete Stormguard aluminium rainwater system



OGO1 — Ogee gutter outlet to suit round pipe



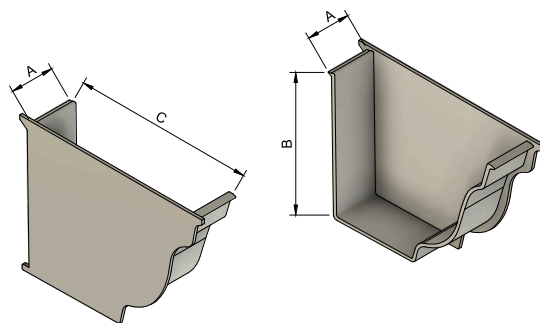
OGO2 — Ogee gutter outlet to suit square/rectangular pipe



# Moulded Ogee Gutter

## Stop Ends

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x75	Left	30	73	102	33	MO43/18L
100x75	Right	30	73	102	33	MO43/18R
125x100	Left	30	96	127	33	MO54/18L
125x100	Right	30	96	127	33	MO54/18R
150x100	Left	30	96	152	33	MO64/17L
150x100	Right	30	96	152	33	MO64/17R
200x150	Left	30	146	196	33	
200x150	Right	30	146	196	33	MO86/17



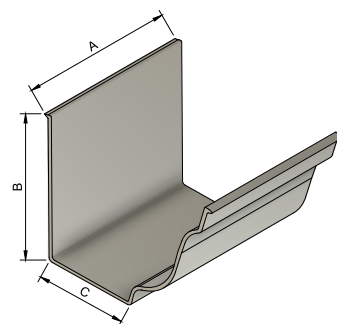
OGS1 — Ogee gutter right-hand & left-hand stop ends

### Key Features

- ✓ Watertight end caps that seal gutter terminals, preventing water leakage at termination points
- ✓ Available for left and right applications across all gutter profiles
- ✓ Designed for durability and perfect integration with the main gutter system

## Jointing Clips

GUTTER SIZE	DIM A	DIM B	DIM C	CODE PREFIX
100x75	100	72		MO43/22
125x100	100	96		MO54/22
150x100	100	96		MO64/22
200x150	100	146		MO86/22



OGJ1 — Ogee gutter jointing clip

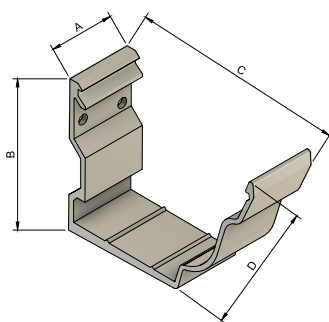
### Key Features

- ✓ Advanced sealing system designed to provide watertight connections at gutter joints
- ✓ Half-round profiles utilise internal jointing clips as standard, maintaining a clean exterior appearance while ensuring reliable performance
- ✓ Both systems incorporate silicone sealant application in specific patterns for optimal waterproofing
- ✓ All clips maintain a crucial 3mm expansion gap between profiles to accommodate thermal movement while preventing water ingress

# Moulded Ogee Gutter

## Fascia Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	DIM C	DIM D	CODE PREFIX
100x75	Fascia Bracket	40	90	124	86	MO43/18
125x100	Fascia Bracket	40	113	150	110	MO54/18
150x100	Fascia Bracket	40	113	175	111	MO64/18
200x150	Fascia Bracket	40	155	137	35?	MO86/18



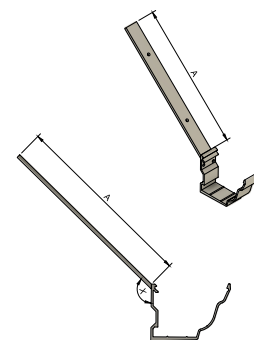
OGB1 — Ogee gutter fascia bracket

### Key Features

- ✓ High-performance mounting brackets designed for direct attachment to fascia boards
- ✓ Compatible with all gutter profiles, providing reliable support at 750mm centres
- ✓ Engineered for straightforward installation while maintaining structural integrity
- ✓ Available in mill finish or powder-coated options to match gutter system aesthetics

## Top-Fix Rafter Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	ANGLE X (°)	CODE PREFIX
100x75	Rafter Bracket (Top Fix)	300	30		MO43/19
125x100	Rafter Bracket (Top Fix)	300	30		MO54/19
150x100	Rafter Bracket (Top Fix)	300	30		MO64/19
200x150	Rafter Bracket (Top Fix)	300	30		MO86/19



OGB2 — Ogee gutter top-fix rafter bracket

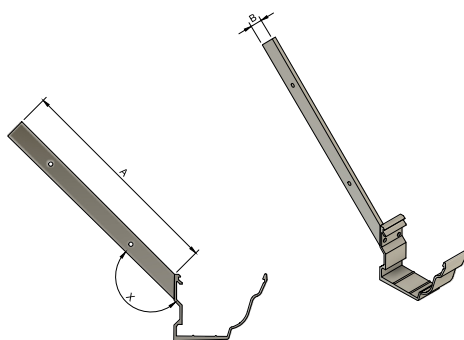
### Key Features

- ✓ Versatile mounting brackets designed for installation directly onto exposed rafters from above
- ✓ Available for all gutter profiles, providing flexible positioning options
- ✓ Ideal for situations where fascia mounting is unsuitable or where traditional installation methods are preferred
- ✓ Maintains secure gutter alignment while allowing for roof structure variations

# Moulded Ogee Gutter

## Side-Fix Rafter Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	ANGLE X (°)	CODE PREFIX
100x75	Rafter Bracket (Side Fix)	300	30		MO43/20
125x100	Rafter Bracket (Side Fix)	300	30		MO54/20
150x100	Rafter Bracket (Side Fix)	300	30		MO64/20
200x150	Rafter Bracket (Side Fix)	300	30		MO86/20



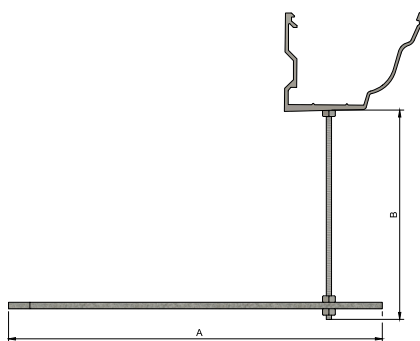
OGB3 — Ogee gutter side-fix rafter bracket

### Key Features

- ✓ Alternative rafter mounting option featuring lateral attachment to vertical rafter faces
- ✓ Suitable for all gutter profiles where top-fix installation is impractical
- ✓ Provides stable support while accommodating different rafter configurations
- ✓ Ensures proper gutter positioning relative to roof edge for optimal water collection

## Rise & Fall Brackets

GUTTER SIZE	TYPE	DIM A	DIM B	CODE PREFIX
100x75	Rise & Fall Bracket	337	200	MO43/21
125x100	Rise & Fall Bracket	337	200	MO54/21
150x100	Rise & Fall Bracket	337	200	MO64/21
200x150	Rise & Fall Bracket	337	200	MO86/21



OGB4 — Ogee gutter rise & fall bracket

### Key Features

- ✓ Adjustable brackets offering variable height positioning for precise gutter alignment
- ✓ Compatible with all gutter profiles, enabling fine-tuning of fall rates for optimal drainage
- ✓ Essential for achieving correct installation levels across extended runs
- ✓ Compensates for uneven fascia boards or structural variations while maintaining professional appearance

# Architectural Aluminium





An aerial photograph of a building's rooftop, showing various sections with different coping systems. The top section has a brown gravel surface with a tan-colored coping wall. The bottom-left section has a grey tiled surface with a dark metal coping wall and contains several HVAC units and a green storage container. The bottom-right section has a grey tiled surface with a glass-enclosed skylight and a tan-colored coping wall. The building's facade is visible on the left and bottom edges.

# Stormguard Coping Systems

Stormguard wall coping systems provide comprehensive weather protection and aesthetic enhancement for parapet and perimeter walls. Engineered for exceptional durability and tested to withstand extreme weather conditions, our coping solutions offer both functional performance and architectural distinction.





### MATERIAL & CONSTRUCTION

#### Material

Manufactured from 2 or 3mm (14 gauge) 1050 aluminium alloy to BS 1470 SIC, ensuring durability and corrosion resistance.

#### Standard Length

Available up to 3 metres in half-metre increments.

#### Customisation

Systems are manufactured to suit individual wall dimensions, including any existing rendering. Each coping profile can be adapted to accommodate variations in wall thickness, stepped parapets and architectural features, ensuring a precise fit regardless of wall configuration.

#### Ventilation

Integrated continuous aperture between the wall and coping system ensures adequate ventilation.



### SYSTEM FEATURES

#### Mechanical Fixing System

Comprehensively secured using robust 2.9mm thick folded aluminium holding down brackets that are strategically positioned at maximum 750mm centres and fixed to the wall top using eight 50mm x 6.5mm Ejoyt stainless steel self-drilling screws per bracket (four per side), resulting in complete zero visibility of all fixings when viewed from ground level.

#### Thermal Expansion

3mm expansion joints between profiles prevent weather-related stress from contraction cycles that aluminium materials experience throughout seasonal temperature variations.

#### Wind Load Resistance

Independently tested to withstand wind speeds exceeding 250mph (383mph for corner sections).

#### Load Bearing Capability

The Stormguard coping system demonstrates exceptional structural performance through comprehensive load testing that validates static point load resistance capabilities of up to 150kg (simulating a person standing on the coping) and impressive line load resistance capacity of up to 200kg specifically designed to accommodate abseiling applications and maintenance access requirements.

#### CONTACT US

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ALUMINIUM RAINWATER SYSTEMS



## COMPREHENSIVE RANGE

### Standard Components

- Straight coping lengths for continuous wall protection
- 90° and 135° corner angles for standard directional changes
- Custom non-standard angles fabricated to specific requirements
- Stop ends for professional terminal finishing

### Specialised Components

- Apex angles for wall peaks and elevated junctions
- Nadir angles for valley configurations and water collection points
- T-sections for wall intersections and complex layouts
- Change-of-Size profiles for walls with varying dimensions
- Upstands for vertical wall terminations

## PERFORMANCE TESTING

### Wind Uplift Resistance

- Straight sections: Tested to exceed 250mph wind speeds
- Corner sections: Tested to exceed 383mph wind speeds
- Testing conducted by BRE (Building Research Establishment)

### Load Resistance

- Static point load: Up to 150kg (simulating person standing)
- Abseil line load: Up to 200kg (simulating rope access work)



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# TECHNICAL DATA SHEET



## STORMGUARD COPING SYSTEMS

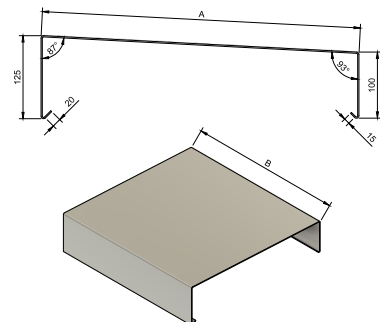
Wall coping provides two beneficial services to both existing and new parapet and perimeter walls. Wall coping is now recognised as the most cost effective means of protecting and weatherproofing existing structures. Wall coping also provides a very attractive, cosmetic improvement to the line of any building. When considering new structures, wall coping is often specified as part of the building programme to minimise any future maintenance.



### Lengths

COPING WIDTH (A)	CODE PREFIX
≤100	CP1
101 to ≤200	CP2
201 to ≤300	CP3
301 to ≤400	CP4
401 to ≤500	CP5
501 to ≤600	CP6
601 to ≤700	CP7
701 to ≤750	CP75
751 to ≤800	CP8
801 to ≤900	CP9
901 to ≤1000	CP10

COPING LENGTH (B)	CODE SUFFIX
3000	/1
2500	/2
2000	/3
1500	/3A
1000	/4
500	/5



CPL1 — Length of Stormguard coping

### Key Features

- ✓ Premium 2 or 3mm thick aluminium wall coping profiles providing superior protection and aesthetic finishing for parapet and perimeter walls
- ✓ Available in standard lengths up to 3 metres in half-metre increments
- ✓ Manufactured to suit individual wall dimensions including any existing rendering
- ✓ Features an integrated continuous ventilation aperture between wall and coping system
- ✓ Independently wind-tested to withstand speeds exceeding 250mph

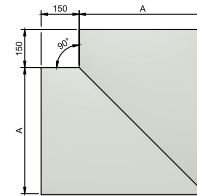
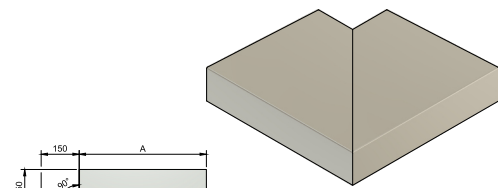


# Stormguard Coping Systems

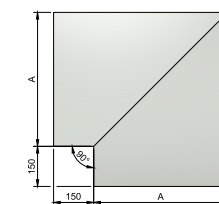
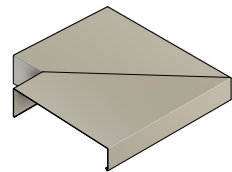
## Corners

COPING WIDTH (A)	CODE PREFIX
≤100	CP1
101 to ≤200	CP2
201 to ≤300	CP3
301 to ≤400	CP4
401 to ≤500	CP5
501 to ≤600	CP6
601 to ≤700	CP7
701 to ≤750	CP75
751 to ≤800	CP8
801 to ≤900	CP9
901 to ≤1000	CP10

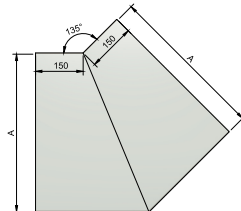
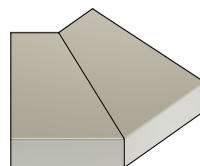
ANGLE (°)	CORNER TYPE	CODE SUFFIX
90°	External	/6
90°	Internal	/7
135°	External	/8
135°	Internal	/9
Non-Standard	External	/10
Non-Standard	Internal	/11



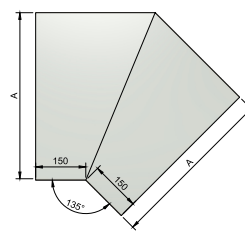
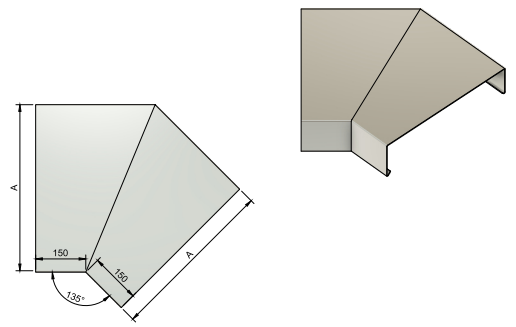
CPC1 — 90° external corner of Stormguard coping



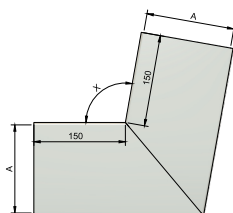
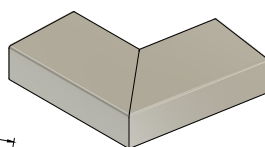
CPC2 — 90° internal corner of Stormguard coping



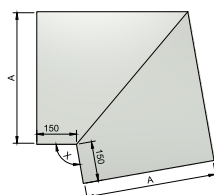
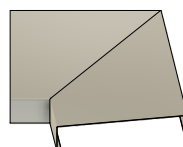
CPC3 — 135° external corner of Stormguard coping



CPC4 — 135° internal corner of Stormguard coping



CPC5 — Non-standard external corner of Stormguard coping



CPC6 — Non-standard internal corner of Stormguard coping

### Key Features

- ✓ Precision-fabricated and welded corner units available in standard 90°, 135° and custom non-standard angles to meet specific project requirements
- ✓ Engineered for perfect alignment with straight coping sections
- ✓ Provides continuous protection around wall perimeters while maintaining consistent appearance
- ✓ Undergone rigorous testing for wind uplift resistance, with corner sections achieving wind resistance exceeding 383mph

# Stormguard Coping Systems

## Apex & Nadir Angles

COPING WIDTH (A)	CODE PREFIX
≤100	CP1
101 to ≤200	CP2
201 to ≤300	CP3
301 to ≤400	CP4
401 to ≤500	CP5
501 to ≤600	CP6
601 to ≤700	CP7
701 to ≤750	CP75
751 to ≤800	CP8
801 to ≤900	CP9
901 to ≤1000	CP10

ANGLE X (°)	TYPE	CODE SUFFIX
Various	Apex	
Various	Nadir	

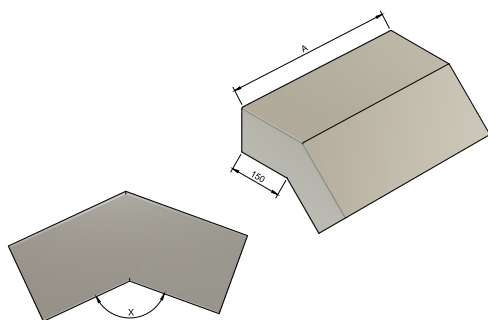
### Key Features

#### Apex angles:

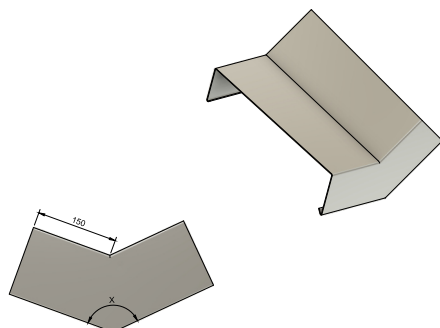
- ✓ Specialised upward angular components designed for wall peaks and roof ridges
- ✓ Precision-engineered to provide seamless protection at elevated wall junctions
- ✓ Creates architecturally striking roofline elements while ensuring complete weather protection at critical high points in the wall structure

#### Nadir angles:

- ✓ Purpose-designed downward angular components for valley configurations and lower wall junctions
- ✓ Engineered to channel water away from vulnerable concave meeting points
- ✓ Ensures comprehensive weather protection at typically problematic low points where water tends to collect, preventing potential water ingress



CPA1 — Apex angle of Stormguard coping



CPN1 — Nadir angle of Stormguard coping



#### CONTACT US

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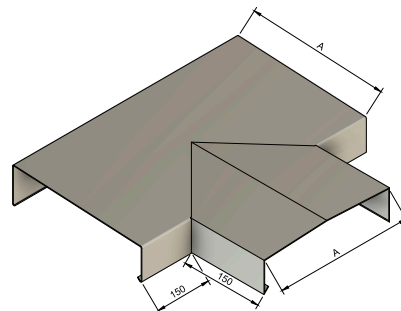
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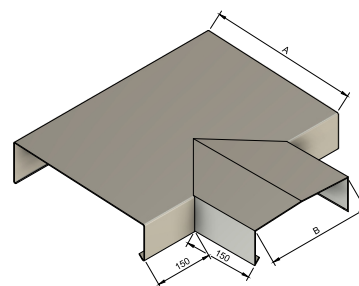
# Stormguard Coping Systems

## T-Junctions & Straight Change-of-Size Profiles

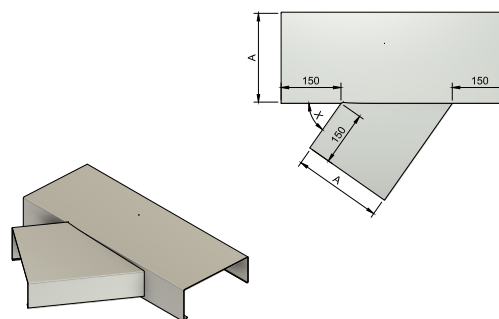
TYPE	COPING WIDTH (B)	ANGLE X (°)	CODE SUFFIX
T-junction		90°	/11
Non-standard T-junction	Bespoke	90°	/11A
Angled T-junction		Bespoke	/11B
Straight COS profile	Bespoke		



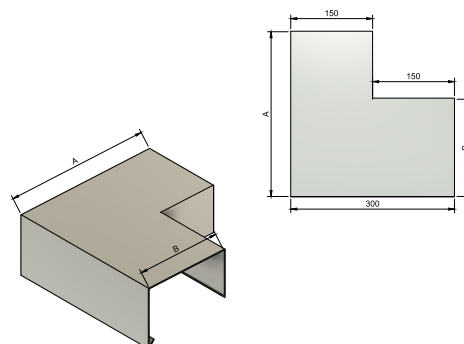
CPT1 — T-junction of Stormguard coping



CPT2 — Non-standard T-junction of Stormguard coping



CPT3 — Angled T-junction of Stormguard coping



CPCOS1 — Straight COS (change-of-size) profile of Stormguard coping

### Key Features

#### **T-Junctions:**

- ✓ Specialised junction components for managing intersecting wall configurations

#### **Non-standard T-junctions:**

- ✓ Bespoke T-section fabricated to accommodate unusual wall intersections beyond standard 90° configurations
- ✓ Custom-manufactured to match specific angular requirements for complex architectural designs
- ✓ Precision-welded construction ensures structural integrity at non-standard junctions
- ✓ Maintains the same high-quality finish and weather resistance as standard components while solving unique design challenges

#### **Angled T-junctions:**

- ✓ Specialised T-junction designed for walls meeting at oblique angles rather than perpendicular intersections, custom-fabricated to specific project requirements

#### **Straight Change-of-Size profiles:**

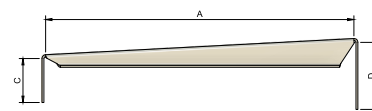
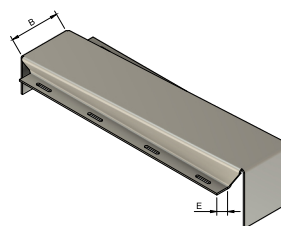
- ✓ Precision-engineered to maintain uniform appearance while accommodating variations in wall thickness
- ✓ Perfect for buildings with stepped parapets or walls that change dimension along their length



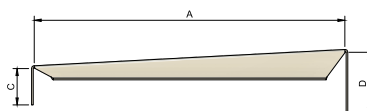
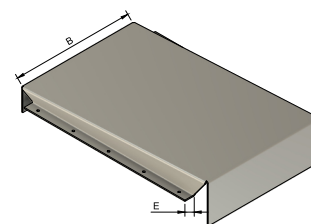
# Stormguard Coping Systems

## Stormfix Brackets, Stop Ends & Upstands

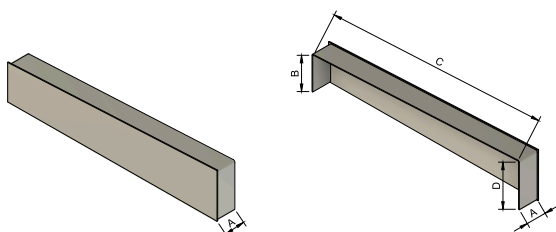
TYPE	DIM B	DIM C	DIM D	DIM E	CODE SUFFIX
Stormfix					14
Stormfix Abseil					14A
Stop End					12 (LH) / 13 (RH)
Upstand					



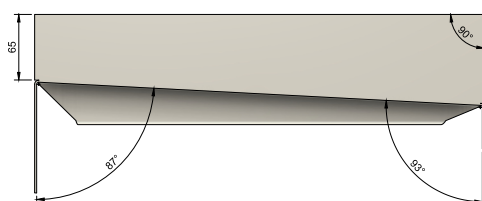
CPB1 — Stormguard coping Stormfix bracket



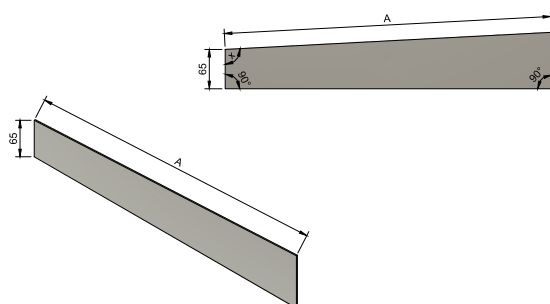
CPB2 — Stormguard coping Stormfix abseil bracket



CPS1 — Stormguard coping stopend



CPU1 — Stormguard coping upstand bracket



CPU2 — Stormguard coping upstand bracket plate

### Key Features

#### Stormfix brackets:

- ✓ Robust support components that secure the coping to the wall structure with zero visibility of fixings from ground level
- ✓ Manufactured from 2.9mm thick folded aluminium for superior strength
- ⚠ Should be fitted at maximum 750mm centres and dressed on-site with synthetic polymer bracket tape to maintain a 3mm expansion joint between profiles

#### Stormfix abseil brackets:

- ✓ System has been tested to withstand static point loads of up to 150kg and line loads of 200kg, simulating abseiling stresses

#### Stop ends & upstands:

- ✓ Purpose-designed terminal components that provide weatherproof sealing at wall endpoints and horizontal-to-vertical coping transitions

# Stormguard Coping Systems

## Radius Coping

Radius Stormguard coping provides sophisticated weather protection for curved parapet walls and architectural features. Manufactured in-house using state-of-the-art laser cutting and precision folding equipment, each radius coping section is custom-fabricated to exact specifications while maintaining the same 2 or 3mm aluminium construction and proven bracket system as our straight coping. Our manufacturing process begins with precise digital templating to capture the exact radius requirements of your project, whether dealing with tight curves on turret features or gentle sweeping arcs across extensive façades. Expert welding techniques create smooth, continuous curves that preserve the integrated ventilation aperture throughout the curved sections and achieve the same exceptional wind resistance performance as straight coping, having been manufactured to the same rigorous standards that enable our straight sections to withstand wind speeds exceeding 250mph.

The radius coping system seamlessly integrates with standard straight coping sections using purpose-designed transition pieces, which are custom-fabricated to provide smooth geometric transitions between curved and straight runs whilst maintaining weathertight performance at these critical junctions. The bracket system adapts to curved applications through strategic positioning that accounts for the additional structural considerations inherent in radius installations. This makes radius coping ideal for heritage buildings where curved parapet features are common architectural elements, contemporary developments incorporating organic curved design elements and any project featuring curved parapet elements. The system is particularly well-suited to listed buildings and conservation areas where curved lead capping replacement is required, offering a maintenance-free alternative that replicates traditional aesthetics whilst delivering superior longevity and performance.





# Eclipse Fascia Systems

The Eclipse Fascia system offers a low-maintenance solution with folded aluminium construction and secret fixings for a clean, streamlined appearance.



# Eclipse Fascia Systems

## Technical Specifications



### MATERIAL & CONSTRUCTION

#### Material

Manufactured from folded 2 or 3mm (14 gauge) 1050A H14 aluminium alloy to BS 1470 SIC, ensuring durability and corrosion resistance. The heavy-gauge material ensures the fascia maintains its structural integrity and visual appearance throughout its service life, even in exposed coastal or industrial environments.

#### Standard Length

Available up to 3 metres in half-metre increments.

#### Finish

Polyester powder coated to BS 6496:1984 and BS EN 12206-1:2004 for enhanced durability and longevity. Available in mill finish or a comprehensive range of RAL colours in matt, satin, gloss or textured finishes to match specific project requirements.

#### Bespoke Customisation

Bespoke fittings are available to accommodate different configurations and applications. Custom-fabricated components can address unique architectural details.

### SYSTEM FEATURES

#### Secret Fixings

Concealed fasteners provide a clean, streamlined appearance and deter vandalism.

#### Heavy-Gauge Aluminium

Ensures structural integrity and resistance to weathering. The substantial gauge specification delivers exceptional dimensional stability, resisting warping or distortion under thermal cycling while maintaining its form throughout decades of service.

#### Versatile Design

The system offers flexibility to suit various aesthetic preferences and remedy situational or environmental challenges.



#### CONTACT US

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ALUMINIUM RAINWATER SYSTEMS

## PRODUCT INFORMATION

PRODUCT NAME  
ECLIPSE FASCIA

PRODUCT CODE PREFIX  
FS

PRODUCT CATEGORY  
ARCHITECTURAL ALUMINIUM



## MAINTENANCE

### Regular Inspection

Inspect all joints and fixings at least twice a year, preferably in autumn and late winter. Focus inspection efforts on jointing clip connections and the integrity of silicone sealant applications, ensuring all fixings remain properly secured to the substrate.

### Cleaning

Wash down polyester coated surfaces regularly with a warm detergent solution. Avoid caustic or abrasive cleaners. More frequent cleaning may be required in aggressive environments (marine or industrial). Coastal installations benefit from monthly washing to remove salt deposits that can compromise the coating, whilst industrial locations may need cleaning every two to three months based on local pollution levels and atmospheric contaminants.

### Touch-Ups

Touch up any surface damage as needed to maintain the finish and prevent corrosion. Matching touch-up paint can be supplied to order for powder-coated fascia systems, enabling spot repairs that preserve both the protective coating performance and visual consistency of the installation.

## ADDITIONAL CONSIDERATIONS

### Compatibility

Avoid direct contact with dissimilar metals or materials containing lime or cement. Use a suitable barrier tape to prevent electrolytic corrosion. Use only compatible fasteners and materials with aluminium profiles.

### Fire Rating

Aluminium is considered non-combustible to BS 476, Part 6: 1989 (1984). The material has a melting point of approximately 660°C and does not support combustion, meaning it will not ignite or contribute fuel to a fire.

### Lightning Conductivity

If a lightning protection system is required, all metal products should be cross-bonded into it.



## CONTACT US

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Augustus Mill, Buckley Street, Macclesfield SK11 6UH

# TECHNICAL DATA SHEET



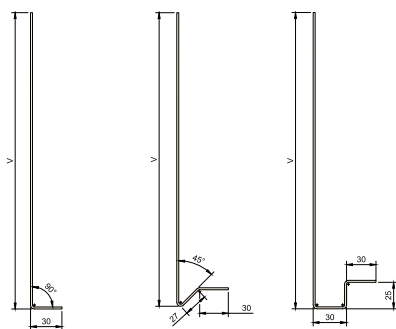
## ECLIPSE FASCIA SYSTEMS

Stormguard's Eclipse Fascia system offers a low-maintenance, architecturally refined roofline solution. Designed with durability and resilience in mind, it is suitable for both domestic and commercial applications, even in exposed locations with high wind loadings.



## Lengths

FASCIA TYPE	CODE PREFIX
L	FSL
Bird's Beak	FSBB
Folded	FSF



FS1 — Three styles of Eclipse fascia in profile

## Key Features

Premium folded aluminium fascia boards available in three distinct Eclipse profile configurations:

### ***L-fascia***

- Single fold for streamlined simplicity

### ***Bird's beak***

- Double fold with pronounced drip detail for enhanced water management

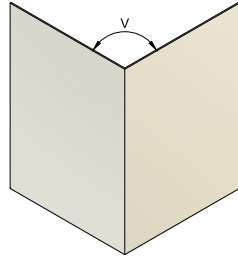
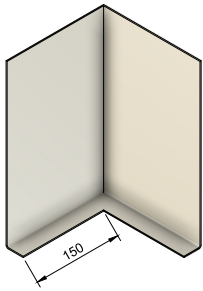
### ***Folded***

- Double fold for maximum structural rigidity

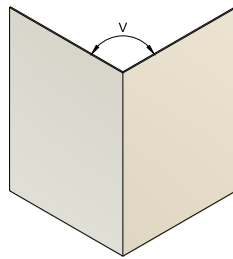
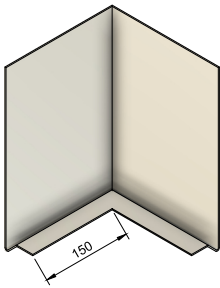
- ✓ Each profile designed to complement different architectural styles while maintaining consistent installation methodology across the Eclipse range

# Eclipse Fascia Systems

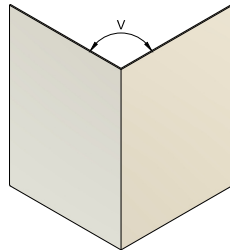
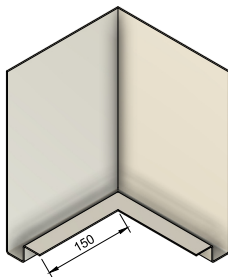
## Corners



FSC1 — Eclipse L-fascia corner



FSC2 — Eclipse bird's beak fascia corner



FSC3 — Eclipse folded fascia corner

FASCIA TYPE	CORNER TYPE	ANGLE (°)	CODE
L	External	90°	FSL
L	Internal	90°	
L	External	135°	
L	Internal	135°	
L	External	Non-Standard	
L	Internal	Non-Standard	
Bird's Beak	External	90°	FSBB
Bird's Beak	Internal	90°	
Bird's Beak	External	135°	
Bird's Beak	Internal	135°	
Bird's Beak	External	Non-Standard	
Bird's Beak	Internal	Non-Standard	
Folded	External	90°	FSF
Folded	Internal	90°	
Folded	External	135°	
Folded	Internal	135°	
Folded	External	Non-Standard	
Folded	Internal	Non-Standard	

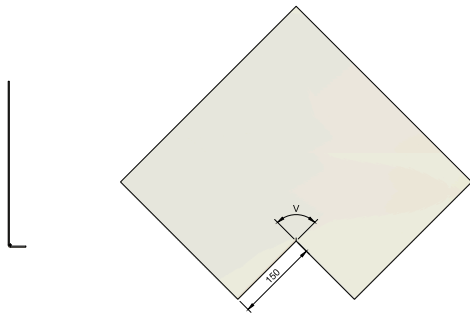
### Key Features

- ✓ Precision-engineered corner units that provide seamless transitions at building corners across all three Eclipse profile types
- ✓ Available for both external and internal corner configurations
- ✓ Eliminates unsightly joints at visible corner positions while maintaining the clean lines and distinctive aesthetic characteristics of each Eclipse profile system
- ✓ Ensures architectural continuity around the entire building perimeter with profile-specific engineering

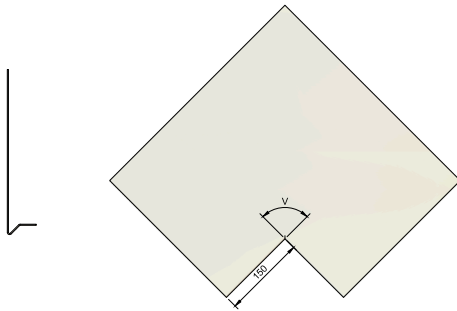


# Eclipse Fascia Systems

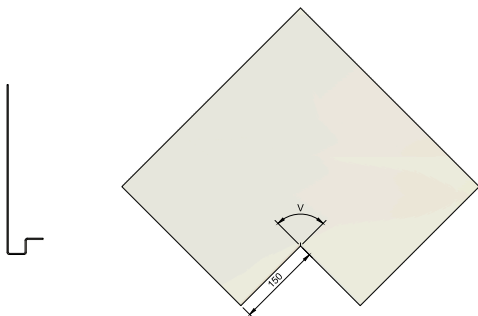
## Apex Angles



FSA1 — Eclipse L-fascia apex angle



FSA2 — Eclipse bird's beak fascia apex angle



FSA3 — Eclipse folded fascia apex angle

FASCIA TYPE	ANGLE (°)	CODE
L	90°	FSL
L	90°	
L	135°	
L	135°	
L	Non-Standard	
L	Non-Standard	
Bird's Beak	90°	FSBB
Bird's Beak	90°	
Bird's Beak	135°	
Bird's Beak	135°	
Bird's Beak	Non-Standard	
Bird's Beak	Non-Standard	
Folded	90°	FSF
Folded	90°	
Folded	135°	
Folded	135°	
Folded	Non-Standard	
Folded	Non-Standard	

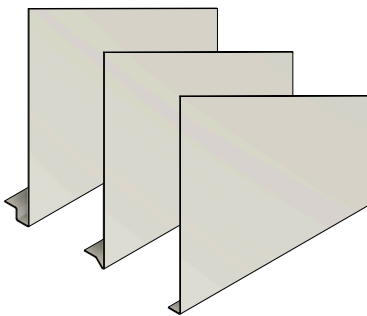
### Key Features

- ✓ Purpose-designed apex components that provide precise, weatherproof finishes at the highest points of gable ends across all Eclipse profile types
- ✓ Each apex angle engineered to integrate seamlessly with bargeboard fascias while maintaining the characteristic fold pattern and drip detail of its specific profile
- ✓ Creates a professional, architecturally balanced appearance at critical roof junctions while ensuring complete weather protection

# Eclipse Fascia Systems

## Box Ends

FASCIA TYPE	CODE
L	FSL
Bird's Beak	FSBB
Folded	FSF



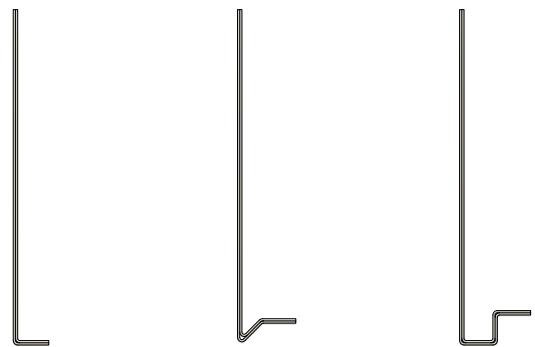
FSBE1 — Three styles of Eclipse fascia box ends

### Key Features

- ✓ Custom-fabricated aluminium components designed to bridge the transition between horizontal fascia and sloped bargeboard elements across all Eclipse profile systems
- ✓ Precision-manufactured to accommodate different roof pitches while preserving the specific geometric properties of each Eclipse profile
- ✓ Ensures continuity of the fascia system around the entire building perimeter while maintaining visual coherence and profile-specific engineering integrity

## Jointing Clips

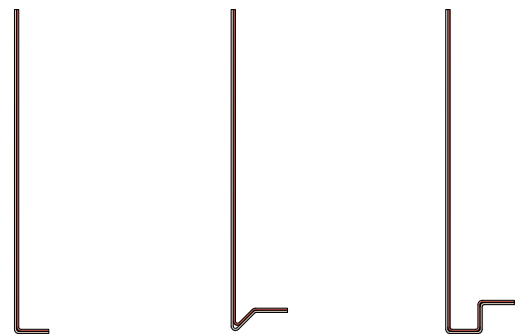
FASCIA TYPE	CODE
L	FSL
Bird's Beak	FSBB
Folded	FSF



FSJ1 — Jointing clips for three styles of Eclipse fascia

### Key Features

- ✓ Specialised internal connection components for creating clean, weather-resistant joints between Eclipse fascia sections across all profile types
- ✓ Silicone sealant application to both sides of the loose internal union ensures secure, watertight connections
- ✓ Ensures a continuous, weatherproof barrier along the entire roofline while allowing necessary material expansion and contraction



FSJ2 — Jointing clips for three styles of Eclipse fascia (marked in red)

## Eclipse Soffit Systems

Stormguard's Soffit system provides a durable, low-maintenance solution for your roofline that complements our fascia systems. Designed for longevity and aesthetic appeal, our soffit systems are suitable for both residential and commercial applications.







### MATERIAL & CONSTRUCTION

#### Material

Extruded aluminium, available in 100mm-wide 3m planks, as well as bespoke, fabricated aluminium solutions to suit any project requirements. Manufactured from 6063 T6 aluminium alloy for superior strength and corrosion resistance. The extruded profiles are precision-engineered to exact tolerances, ensuring consistent quality and reliable performance across all installations. Bespoke fabricated solutions can be tailored to accommodate non-standard dimensions, curved installations or unique architectural requirements that standard planks cannot address.

#### Finish

Polyester powder coated to BS 6496:1984 and BS EN 12206-1:2004 for enhanced durability and longevity. Available in mill finish or a comprehensive range of RAL colours in matt, satin, gloss or textured finishes to match specific project requirements.

#### Design Options

The extruded soffit system offers tongue and groove, butt joint or shadow line finishes, providing flexibility to suit your aesthetic preferences.

### SYSTEM FEATURES

#### Secret Fixings

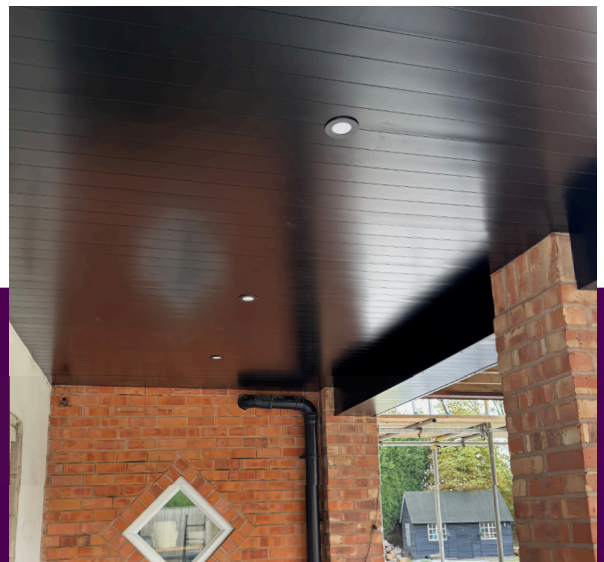
Concealed fasteners provide a clean, streamlined appearance and deter vandalism.

#### Heavy-Gauge Aluminium

Ensures structural integrity and resistance to weathering. The robust gauge specification provides long-term dimensional stability, preventing warping or sagging over time while contributing to the product's exceptional sustainability and extended service life.

#### Comprehensive Range of Trims and Sections

Available to accommodate various applications and configurations.



#### CONTACT US

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ALUMINIUM RAINWATER SYSTEMS

## PRODUCT INFORMATION

PRODUCT NAME  
ECLIPSE SOFFIT

PRODUCT CODE PREFIX  
SF

PRODUCT CATEGORY  
ARCHITECTURAL ALUMINIUM



## MAINTENANCE

### Regular Inspection

Inspect all joints and fixings at least twice a year, preferably in autumn and late winter. Pay particular attention to silicone sealant integrity at panel connections and ensure that all fixings remain secure.

### Cleaning

Wash down polyester coated surfaces regularly with a warm detergent solution. Avoid caustic or abrasive cleaners. More frequent cleaning may be required in aggressive environments (marine or industrial).

### Touch-Ups

Touch up any surface damage as needed to maintain the finish and prevent corrosion.



## ADDITIONAL CONSIDERATIONS

### Compatibility

Avoid direct contact with dissimilar metals or materials containing lime or cement. Use a suitable barrier tape to prevent electrolytic corrosion. Use only compatible fasteners and materials with aluminium profiles.

### Fire Rating

Aluminium is considered non-combustible to BS 476, Part 6: 1989 (1984). While aluminium has a relatively low melting point compared to other structural metals, it does not support combustion or contribute to fire spread, making it suitable for use in all building classifications. The material will not emit toxic fumes when exposed to fire and maintains its structural properties up to temperatures of approximately 200°C. This non-combustible classification ensures compliance with Building Regulations requirements for external building components.

### Lightning Conductivity

If a lightning protection system is required, all metal products should be cross-bonded into it.

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# TECHNICAL DATA SHEET



## ECLIPSE SOFFIT SYSTEMS

Stormguard's Eclipse Soffit system provides a durable, low-maintenance solution for your roofline that complements our fascia systems. Designed for longevity and aesthetic appeal, our soffit systems are suitable for both residential and commercial applications, offering essential roof space ventilation while maintaining an elegant underside to eaves.



### Extruded Soffit System

TYPE	CODE PREFIX
100mm wide soffit plank	



SFE1 — 100mm wide extruded Eclipse soffit planks

#### Key Features

- ✓ Premium extruded aluminium soffit panels delivering sophisticated underside roofline coverage with integrated ventilation capabilities
- ✓ Available as 100mm-wide 3m planks manufactured from heavy-gauge extruded aluminium alloy for superior structural integrity
- ✓ The tongue-and-groove interlocking system provides seamless installation while maintaining consistent ventilation throughout the soffit area
- ✓ Offers multiple finish options including tongue and groove, butt joint or shadow line configurations to elevate façade aesthetics
- ✓ Features concealed fixings for a clean, streamlined appearance that deters vandalism
- ✓ Essential for providing proper ventilation to roof spaces while maintaining an elegant underside to eaves



# Eclipse Soffit Systems

## Extruded Soffit System

### Key Features

- ✓ Comprehensive range of purpose-designed extruded aluminium trim components for complete extruded soffit plank installations

#### **Starter Trim**

- ✓ Initiates installations at wall connections with integrated fixing channels for straightforward wall attachment and tongue detail for positive plank engagement, ensuring consistent alignment along the entire wall-to-soffit junction

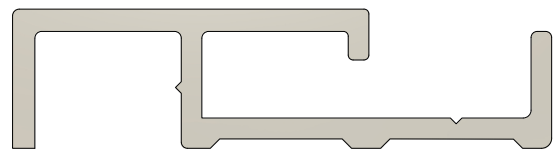
#### **Closure Trim**

- ✓ Terminates installations at fascia board connections with integrated groove detail for positive engagement with the final plank and flush-fitting profile for seamless fascia integration, providing weatherproof finishing while protecting exposed plank ends

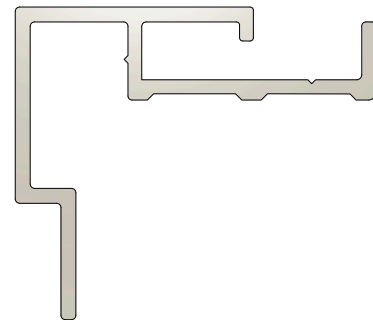
#### **Corner Trim**

- ✓ Manages directional changes at both external and internal 90-degree corner configurations, featuring dual-channel design to accommodate plank engagement from both intersecting directions while maintaining consistent ventilation characteristics and eliminating unsightly joints at visible corner positions

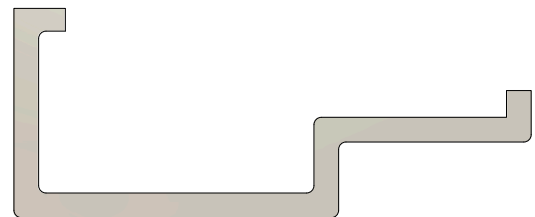
TYPE	CODE PREFIX
Starter trim	
Corner trim	
Closure trim	



SFEST1 — Extruded Eclipse soffit starter trim



SFECR1 — Extruded Eclipse soffit corner trim



SFECL1 — Extruded Eclipse soffit closure trim



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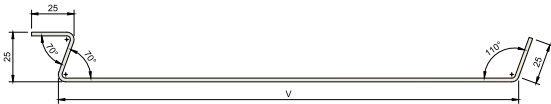
# Eclipse Soffit Systems

## Folded Soffit System

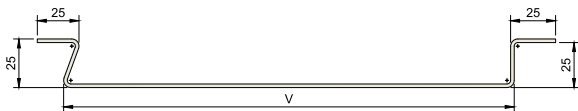
SOFFIT SECTION	CODE PREFIX
Starter	
Middle	
Closure	



SFFS1 — Folded Eclipse soffit starter section



SFFM1 — Folded Eclipse soffit middle section



SFFC1 — Folded Eclipse soffit closure section

### Key Features

- ✓ Precision-fabricated folded aluminium soffit panels providing bespoke underside roofline solutions for variable-width applications

Available in three distinct profile configurations:

#### Starter sections

- for wall-mounted initial installations

#### Middle sections

- for continuous runs of custom widths

#### Closure sections

- for terminal finishing at fascia connections

- ✓ The interlocking fold design provides structural rigidity while accommodating non-standard soffit widths that exceed the 100mm limitations of extruded planks
- ✓ Ideal for commercial applications, deep eaves, or architectural designs requiring wider soffit coverage
- ✓ Features concealed fixing methodology for clean appearance



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