



ALUMINIUM RAINWATER SYSTEMS

## Technical Product Datasheet Aluminium Downpipe Systems

A range of traditionally designed, socketed aluminium downpipes. Connections between pipes and fittings are made with loose cast sockets, available with ears for fixing back to the wall. Pipes can also be fixed with a choice of base clips to give alternative projections.

**CAST COLLAR 63mm, 76mm, 102mm, 76x76mm, 102x76mm, 102x102mm, 150x150mm**

The Swaged system is based on mechanically expanded spigots which give a smooth, clean appearance that complements modern building design. The pipes are mounted on Brackets to stand clear of the structure.

**SWAGED 63mm, 76mm, 102mm, 76x76mm, 102x76mm, 102x102mm, 150x150mm**

Security Anti-Vandal Pipes designed to provide ungraspable flush fitting pipes with concealed joints and fixings.

**SECURITY 75mm, 100mm, 100x75mm, 76x76mm, 100x100mm, 150x150mm**

Flush Joint Pipes designed to provide a flush appearance at the joint

**FLUSH JOINT 63mm, 75mm, 100mm, 75x75mm, 100x75mm, 100x100mm, 150x150mm**

### General

#### Pipe Jointing

All rainwater pipe sockets are of a light drive fit, apply a light bead of silicone to the internal aperture inside the socket prior to connection. This will provide a permanent flexible seal and prevent any leakage from capillary action.

#### Colour Options

Stormguard Aluminium rainwater products are supplied in plain (mill) finish or in a range of factory applied polyester powder coatings. Colours with a BS or RAL number can be supplied.

Architectural approved coater of Dupont, Akzo Nobel, Syntha Pulvin, IGP & Inver paint systems, ISO accredited to 9001:2008

#### Manufacture

**Cast Aluminium** Collars are made from commercial LM2 grades of aluminium alloy to BS EN 1559:1997, BS EN 1676: 1997 and BS EN 1706: 1998, nominal thickness 4mm.

Extruded Aluminium rainwater pipes are extruded from alloy 6063 T4 T5 T6 to BS EN 775-9-2001. Aluminium sheet is manufactured from aluminium alloy SIC H4 to BS 485- 1:1994. The

pressed components are produced from sheet manufactured from SIC H4 BS EN 485-1:1994. Aluminium castings are produced from aluminium alloy to BS EN 1706:1998.

### **Durability**

Aluminium gutter systems have a low maintenance life in excess of 40 years in rural and suburban conditions, and in excess of 25 years in industrial and marine conditions.

### **Compatibility**

Direct aluminium contact with dissimilar metals or with materials containing lime or cement should be avoided. The polyester coating is an insulation but a liberal coating of bitumen will be an additional safety factor. The use of aluminium in conjunction with copper roofs, cladding or flashings should be avoided.

### **Contact Stormguard Rainwater Systems**

Technical Services for advice where heavily polluted atmospheres or marine conditions are involved for advice on material choice.

### **Fire Rating**

Non-combustible to BS 476, Part 4: 1970 (1984). Melting temperature for aluminium is approximately 660°C.

### **Lightning Conductivity**

The need for a lightning protection system is a decision to be made between the architect, the builder and the lightning protection engineer. This should be based on the risk factor as calculated in BS 6651:1999. When such a system is chosen for a building all metal gutters should be cross bonded into it. Both economy and practicality indicate that the eaves gutter can be used in place of an eaves conductor tape by use of the Stormguard Rainwater Lightning Link.

### **Maintenance - Routine Inspection**

- Regularly clean out rainwater heads and gutters and ensure that downpipes are clear at all times.
- Check that joints and fixings are secure by periodic inspection, not less than twice a year, and preferably at the beginning of Autumn and again at the end of Winter.
- Brush down unpainted surfaces lightly to inspect if required.
- Plain finish goods will develop a natural grey aluminium oxide coating, which forms a hard protective layer, preventing additional oxidization.
- Even with a well fixed installation, ladders should not be rested against the gutters.
- Clean polyester coated surfaces by regularly washing down with a warm detergent solution, and maintain paintwork in good condition. Do not clean with caustic or abrasive materials. In aggressive atmospheres such as marine environments and industrial areas BS 6496:1984 requires this cleaning to be carried out at up to three month intervals to maintain optimum appearance and durability.
- Lightning linkage fixings should be tested regularly in accordance with the specialist electrical maintenance instructions.

### **Technical Support**

Technical advice is available from Stormguard Rainwater Systems:

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Stormguard Rainwater Systems pursues a policy of constant product development and information contained within this datasheet is therefore subject to change without notice. The customer is responsible for ensuring that each product is fit for its intended purpose