



FUNCTION

Kalsi Aquaflow PVC Rainwater systems comprise gutter sections and fittings, with accompanying downpipe sections and fittings to efficiently convey rainwater from the roofs of domestic, commercial and industrial buildings.

Kalsi Aquaflow Rainwater systems are complemented by the Kalsi Aquaflow Drain, Sewer, Surface Water, Soil and Waste systems, providing a complete solution for all drainage requirements.

AUTHORITY

Kalsi Aquaflow Rainwater systems satisfy the requirements of the following:

- The Building Regulations 2002, as amended.
- Building Standards (Scotland) Regulations 1990, as amended.
- Building Regulations (Northern Ireland) 1990, as amended.

STANDARDS

Kalsi Aquaflow Rainwater systems are manufactured under the following British Standards:

BS EN ISO 9001: 2008 – Quality Systems

BS 4576: Part 1: 1990 – Specification for Unplasticised PVC Rainwater systems

BS 4514: 1983 – Specification for Unplasticised PVC soil and ventilating pipe fittings and accessories

COMPOSITION

Extruded gutter and downpipe sections and injection moulded fittings are made from PVC compounds complying with the material requirements of BS 4576: Part 1: 1989, containing the necessary processing additives, stabilisers and pigments to give products excellent appearance, durability, and performance. Seals in the gutter and downpipe fittings are manufactured from rubbers complying with BS 2494: 1990, or BS 4255: Part 1: 1986.

THERMAL EXPANSION

PVC has a coefficient of linear expansion of 6×10^{-5} . Consequently a 2m length of gutter or downpipe will expand by 2.4mm for a 20°C temperature rise. This expansion is taken into consideration in the design of Kalsi Aquaflow Rainwater fittings and must be accommodated when installing.

BIOLOGICAL AND CHEMICAL RESISTANCE

Polluted industrial atmospheres will not effect Kalsi Aquaflow rainwater systems. PVC is vermin and rot proof and resistant to most commonly occurring chemicals: notable exceptions however are solvents, including those incorporated in most timber preservatives.



TIMBER PRESERVATIVES

Wood preservative, which has been applied to a timber surface, must be allowed to dry thoroughly before any Rainwater fitting is fixed to that surface.

MAINTENANCE

The security of gutter and downpipe brackets should be checked regularly as part of the overall building maintenance programme. Check also that no components have become dislodged or loose and that the gutter extrusions have not moved beyond any of the thermal expansion allowance marks in the fittings. Rainwater gutter systems should be cleaned out on a regular basis, at least annually, more frequently in locations where there are large amounts of wind borne debris, e.g. in sandy areas or in close proximity to deciduous trees. The high gloss surface finish retains little dirt. A mild detergent solution is ideal when cleaning dirt from the external surface is necessary. Kalsi Aquaflo Rainwater systems are self coloured, painting is not normally required for several years after installation. When painting is carried out, the surfaces of all components should be lightly roughened with sandpaper and cleaned. An oil based gloss paint is the most suitable. Do not use an undercoat.