



THE CASE FOR METAL SYSTEMS



There are many advantages in specifying metal rainwater systems, not least outstanding performance, longevity and value for money. With specifiers increasingly looking at the whole life cost of their projects, the Metal Gutter Manufacturers Association (MGMA) looks at the benefits of specifying cast iron and both cast and extruded aluminium metal rainwater systems.

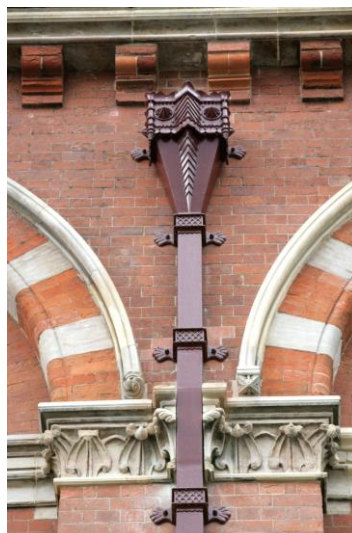
Cast iron gutters have a successful track record of performance both on historical and traditional buildings in excess of 100 years. There are many examples which attest to their longevity, with some of the gutters dating back to the early 19th century which are still in use today. With periodic maintenance, a life of at least 40 years would be expected for products supplied today, and many will be in use years after that.

Usually supplied in primed or a pre-coated factory finish, cast iron rainwater goods can be re-decorated an unlimited number of times with new external decoration, but should not need recoating before 10 years depending on the location.

Extruded and cast aluminium gutters are, in comparison, relative newcomers, being introduced in response to a glut of aluminium which became available at the end of World War Two. Typically, in the United Kingdom these are supplied with a polyester powder coating, which provides a robust decorative coating, with a very significant lifespan. The photograph shows a gutter of this type, which has been fitted on a south facing elevation for over 10 years, in a location only one mile from the coast and which has had no maintenance or cleaning during that the period.

On heritage sites, and buildings of special architectural significance, custom fabrication options are available, creating rainwater goods which can exactly match existing items, or specific architectural details. Although slightly more time consuming to manufacture, gutters can even be produced on a horizontal radius, to perfectly follow the profile of a curved building, however tight the radius of that building.

Examples of the way heritage can be safeguarded by sympathetic use of custom fabricated items include the renovation works at St Pancras station where existing rainwater systems, despite being almost 150 years old were still is use.



Alumasc worked closely with the main contractors to produce bespoke moulds, creating cast iron replicas of all the existing pipes and hoppers to take away rainwater from the vast single span roof, which is still the largest of its type in the world. Not far away, at the Palace of Westminster Hargreaves Foundry has replaced three large cast iron gutters which after 160 years were being to show signs of wear and tear.

There has been a significant increase in cast iron effect uPVC products in recent years. Are these a cheap alternative to cast iron/aluminium or a higher spec decorative upgrade for standard uPVC? If we look at potential life expectancy, there is no comparison. All plastic materials deteriorate with UV exposure, both structurally and cosmetically, and in most cases after 10 years life, most uPVC materials will have lost some structural strength, and will have faded to some extent.

This is exacerbated by production methods of uPVC rainwater goods which have different processes for gutters, downpipes and fittings, and thus often exhibit different speeds of fading due to UV exposure. With no reliable means of re-coating uPVC and no way of improving structural integrity, when fading reaches an unacceptable level a decision is often taken to replace the product completely.

For metal gutter products, structural integrity will only be impaired due to long term corrosion, and thus products are unlikely to deteriorate for very many years. Products can be re-coated to provide a refreshed finish when required, and so life expectancy could be at least four to five times longer than a lookalike product, and when historical cases are considered, possibly many times longer.

This would suggest that although cast iron look-alike products are a well-made and useful product, they should not be considered as a cheaper alternative for metal gutters, rather they are a decoratively enhanced version of a regular plastic gutter, and share the same properties as other plastic gutter systems.

It would be wrong to suggest that these systems do not have some very positive features, and unquestionably do have a specific niche in the market. However, the specifier, client, installer and end user must all be made aware that these are not the same as a metal rainwater system, and will have a far shorter like expectancy.

Well fitted and adequately maintained cast iron and extruded or cast aluminium gutters can last a lifetime, and thus although perhaps slightly more costly at the onset have a much lower overall whole life costing.

For further information about the range of metal rainwater systems visit the web site at www.mgma.co.uk

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