

## **Rytons A1 Fire-rated Ducting Kits and Air Brick Grilles Metal Corrosion Statement**

### **Composition**

Rytons A1 Fire-rated Ducting Kits and co-ordinating Air Brick Grilles are fabricated from 0.9mm galvanised steel, a mild steel sheet coated with zinc for long term corrosion protection. Read more about the galvanised steel [here](#). Rytons range of Air Brick Grilles are supplied finished in a fire-rated RAL colour powder coating achieving a test result of A2-s1, d0. NB: The material used is named and considered fire class A1 without testing, as per European Commission paper 96/603/EC referred to in BS EN 13501-1:2018.

### **Corrosion – General Introduction**

All metals will eventually corrode. Some, like pure iron, corrode quickly. Others, such as stainless steel, corrode slower due to a combination of iron and other alloys.

The rate at which metal will corrode is dependent on many factors. The main factor is the environmental conditions to which it is exposed, and will vary dependent on:

- average and peak humidity
- salt content in the air
- average and peak temperature
- number of rainfalls per year
- pH of the rain
- atmospheric sulphur dioxide (SO<sub>2</sub>)

### **Self-healing Properties of Galvanised Steel**

**(Paragraph from the Galvanizers Association [www.galvanizing.org.uk](http://www.galvanizing.org.uk))**

Zinc corrodes in preference to steel and sacrifices itself to protect the steel, hence hot dip galvanizing will provide this sacrificial protection. The corrosion products from the zinc are deposited on the steel resealing it from the atmosphere and therefore stopping corrosion.

### **Galvanised Steel in the Construction Industry**

Galvanised steel is tough, making it an ideal material to withstand the rigours of site life. Over the last 150 years galvanised steel has been used in many environments and in numerous industries to build structures such as balconies, bridges, building frames etc.

### **Rytons A1 Fire-rated Ducting Kits and Air Brick Grilles**

Rytons A1 Fire-rated Ducting Kits and co-ordinating Air Brick Grilles are designed to deliver ductwork with an effective and efficient airflow. The materials are suitable for use when following the Building Regulations Regulation 7(2), Approved Document B and 2.7 of Building (Scotland) technical handbook 2019.

All information given is in good faith and to the best of our knowledge is true and accurate, however, no guarantee regarding its accuracy is given, nor should Rytons representatives or agents imply any such guarantee. Customers should satisfy themselves that the products are suitable for the intended purpose.