

## ALL THINGS ALUMINIUM – 1050A

### Versatile

Aluminium is the most abundant metal in the Earth's crust (8.1%), second most malleable and sixth most ductile<sup>1</sup>. Although extracting it and commercially producing it is energy intensive, once made, aluminium's corrosion resistance and ease of recyclability make it a popular choice across a wide range of applications.



Alloy designation	Characteristics
1050A (Former BS designation 1B)	Very good atmospheric corrosion resistance. Very good workability. High thermal and electrical conductivity (preferred alloy 1350). Attractive appearance, high reflectivity. Suitable for decorative anodising. Very good weldability. Low mechanical properties.

(Source: ALFED, Aluminium Rolling, Fact Sheet 18)

### Here is an overview of some of the most popular uses for commercial aluminium:

#### Commercial Aluminium Alloy – 1050A H14 sheets

This is a popular aluminium-based alloy for general sheet metal work that is usually formed by extrusion or rolling. Due to its moderate strength, it lends itself to a wide range of applications. These include:

- Packaging containers and foils
- Collapsible tubes and radiator tubes
- Wide jar closures
- Printing plates
- Heat exchanger strips and boiler making
- Kitchenware, chemical, food industry equipment and containers
- Automotive trim
- Light reflectors
- Electrical industry - cable sheathing and cable management
- Architectural flashings and panelling.

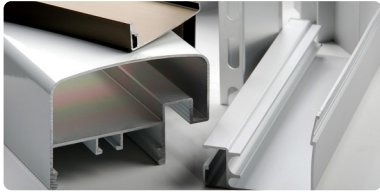
Aluminium has excellent corrosion resistance and weldability, as well as high ductility and reflective finish.



<sup>1</sup> Source: RSC.org/periodic-table/element/13/aluminium

## More sought after than silver!

The first commercial application of aluminium was as far back as the mid 1800's, and Napoléon III's VIP's were given aluminium cutlery... while less important guests had to make do with silver cutlery!



### Electrical industry – cable management

1050A aluminium alloy is popular in the electrical industry due to its high electrical conductivity. Also, despite being lightweight, aluminium's mechanical strength and impact-resistance means it is ideally suited for trunking and internal cable management systems and PCB board manufacturers.



### Architectural flashing

Due to the corrosion resistance and malleability of 1050A aluminium, it makes an ideal solution for exterior flashing, cladding, rainscreen and acoustic panel manufacturers and much more. The use of aluminium helps waterproof exterior roofing joins for example, making them last longer - with fewer repairs and cleaning required than other materials.



### Food industry – containers and foil

Being easily formed, a food-grade metal and affordable, it is no surprise that 1050A aluminium is used in food industry containers and foils. Commercial grade aluminium is ideal for low-acid and low-salt food containers, or with an appropriate coating for more salty or acidic contents.



### Chemical industry – process plant equipment and containers

Aluminium equipment is used for the storing and transportation of certain chemicals. For example, nitric acid can be stored and transported in such containers without risk of corrosion.



### Lamp reflectors

Aluminium reflects light more effectively than many other metals and doesn't need expensive coatings. When aluminium is polished it becomes highly reflective, making it ideal for both internal and external lighting applications. Aluminium lighting fixtures are more durable than those made with comparable materials.



### Alanod Aluminium 1050A H14 sheets and rolls

Alanod can provide sheets, blanks, and rolls of 1050A H14 in a range of sizes. The team can also tailor the cutting and slitting of orders to meet a wide range of customer demands.

These include:

- Tight tolerances on rolls and slip coils, with minimal edge bow, for ultimate quality control
- A good flatness, even on large sheets up to 3.5m long
- Small blanks with tight tolerances can be created on both length and width
- Bespoke flatness suitable for screen printing.



For more information about Alanod's commercial aluminium services or for technical advice, please visit [www.alanod.co.uk](http://www.alanod.co.uk)