MAINTENANCE OF CONTINUOUSLY ANODISED ALUMINIUM

Introduction

Anodising is the best treatment for aluminium used in architectural applications – for a number of different reasons – its authentic metallic sheen, its low weight, its durability and its recyclability. Key to the long term sustainability of a building is the low maintenance after construction. The perfectly smooth, non-porous, non-electro-static surface of the anodic layer reduces the adherence of dust and dirt, this way reducing cleaning frequency and effort.

Natural washing by rainwater is the most effective means of maintaining a clean surface and removing foreign matter from the panels. By respecting some basic design rules, the architect can create conditions for optimising natural washing.

However, like any other building cladding, anodised aluminium should be regularly maintained in order to maintain the finish and to protect the surface against possible corrosion.

Cleaning frequency

The cleaning frequency is depending on several factors but principally the:

- surrounding environment
- climatic conditions
- building design

It is recommended to clean the exterior of a building at least annually. Due to specific local conditions, this frequency should be increased.

On the building parts which cannot be naturally washed by rainwater (such as openings, entry porches etc.) the cleaning frequency should be increased.

The greater the cleaning frequency, the more the cleaning will be easy.

It is important to plan the cleaning from the first year after construction and not to wait 3-5 years before performing the first cleaning. If the building is cleaned from the beginning at regular intervals, the cleaning operation will be easy, cheaper and the cleaning agents will be softer and more environmental friendly.

In urban and marine environments, it is recommended that the anodised surface should be washed down at three monthly intervals but at a minimum every six months. In industrial environments, this cleaning may need to be more frequent but, generally, the condition of the surface will make this apparent.

General Cleaning

The general and regular cleaning of anodised aluminium consists of a simple washing with water added with a neutral soft detergent followed by a rinsing with clear water and a wiping with a soft, absorbent rag. This operation can be carried out at the same time as window cleaning. On a quality continuously anodised surface, the aluminium oxide on the surface will be stable in a pH range between 5 to 8; cleaning solutions should have a pH figure in this range.

Specific Cleaning

It may be necessary to scrub some surfaces, particularly in areas where dirt accumulates as a consequence of rainwater failing to wash deposits off naturally. The anodising will tolerate use of a stiff bristle or nylon brush without any damage to the finish or invalidation of the guarantee.

In the case of tenacious deposits or smut formation, it may be necessary to use more aggressive cleaners such as ultra-fine abrasive pads, powdered pumice with water or a proprietary cleaner. Tenacious deposits normally only occur when the method or frequency of general cleaning is inadequate for the local environment.

After cleaning, all surfaces should be washed down to remove any residual deposits.

Use of a more aggressive cleaner will not compensate for lack of regular maintenance, in particular because the use of such a cleaner may damage the anodised surface.

It is recommended that an unobtrusive test area is cleaned before work commences using the cleaning agent at the correct concentration and applied in accordance with the manufacturer's instructions. After the cleaning agent has been allowed to dry an assessment should be made to confirm that the results are satisfactory.

General Comments

Quality continuously anodised film with an appropriate anodic film thickness has a proven service life of in excess of 30 years if properly maintained.