

RECOMMENDATIONS FOR MAINTENANCE

ALUMINUM OF SADEV'S PRODUCTS

To maintain the aesthetic and mechanical qualities of aluminum, **Sadev** recommends regular maintenance operations.

The following recommendations are not exhaustive but summarize the sensitive points to consider.

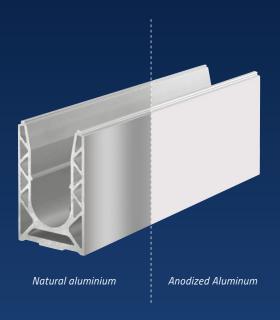




PRECAUTIONS DURING MANUFACTURING

From the conception of your project to delivery, all our attention is focused on the parts during manufacturing, packaging, storage, and preparation for shipment.

Our teams work daily for your satisfaction.



ANODIZING:

PRINCIPLE OF ALUMINUM PROTECTION

Aluminum naturally generates an oxide layer that protects it from corrosion.

Unlike most metals, it can be used even in the following applications if it's oxidized on the surface.

Moreover, without this oxide layer, it would be unsuitable for most applications.

Different types of surface treatments can further improve this resistance (anodizing, lacquering, ...).

All our aluminum products have a protective anodising layer of at least 20 µm (a common protection in the building industry) applied after the machining process (drilling and cutting with anodic protection).



PRECAUTIONS BEFORE INSTALLATION

In order to preserve the characteristics of aluminum, it is essential to store and handle it with care and work in the cleanest possible environment until the project is delivered.

It is therefore necessary to take care of the site environment and to respect certain work rules, in order to avoid, among other things:

- Ferrous pollution: steel particles are deposited on the aluminum when the same tools are used to work steel and then aluminum, or when steel is worked close to aluminum (welding, grinding).

 We recommend using different tools, especially for cutting (saw blades for example).
- **Galvanic corrosion:** alteration when a metal or alloy is electrically coupled to a metal or different alloy (e.g. Alu+ Stainless Steel / Alu + Steel).

Insulate the 2 metals with a neutral material (POM, Polyethylene, etc.) in order to limit contact.

• **Chemical pollution:** caused by the discharge of chemical products of both industrial and domestic origin. They can result in particular from the use of pesticides, detergents or even from heavy metals.

WARNING:

- Aggravating factor: the combination of the following factors: saline environment, temperature, chlorinated environment, generate an acceleration of the corrosion process. This acceleration varies according to the combination of these different factors. Precautions must be taken into consideration.
- Other pollution or corrosions are possible depending on site conditions.



• **WARNING:** Do not use chemicals that are incompatible with aluminum, including for cleaning (e.g. chlorinated products, acids, alkaline products, etc.).

It is impossible for us to list all the types of pollution that can alter the quality of aluminum because of multitude of factors can come into play.



At the end of the work, it is essential to clean any residue with water and a mild detergent (PH between 5 and 8, such as dish-washing liquid, soap), rinse with clear water, then wipe off.

Each cleaning movement must follow the length of the profile.

As aluminum and its finishes are sensitive to acidic (pH < 5) and alkaline (pH > 8) products, it is strongly recommended not to clean with household products such as:

• Hydrochloric acid, soda, vinegar and alkali.

All cleaning must be tested beforehand on a less visible part.

PAY ATTENTION TO THE CLEANING PROCESS:

All cuts must be protected.

- Soft cloth or sponge without abrasive parts. Your cleaning process must imperatively take into account the polishing direction.
- Water + soap. No abrasives. The cleaning must be done within 15 days after the start of the work. It is also important to clean at the completion of work. **ANY RE-POLLUTED AREA MUST BE RE-CLEANED.**



ROUTINE MAINTENANCE / MAINTENANCE OF YOUR SITE

For routine maintenance, we recommend the same type of cleaning that is carried out at the completion of work, i.e. the use of soap and water, followed by rinsing with clear water and wiping.

This must be regular and scheduled according to the type of building and its location.

The frequency of cleaning depends on the environment and the concentration of dirt on the surface.

The more frequent the cleaning, the easier and more economical it is. This operation can be combined with the cleaning of the glazing.

In the case of light soiling or deposits (lime-scale, sea salts, etc.), slightly abrasive cleaning products of type F, specifically developed for this application, or non-aggressive fibers coated with fine, neutral polishing powder can be

In the case of very heavy soiling (due to lack of maintenance) requiring renovation, it is recommended to turn to a specialized company.

REGULARLY MAINTAINED SURFACES	MODERATELY SOILED SURFACES	HEAVILY SOILED SURFACES
 Washing with water with wetting agent (pH between 5 and 8) Thoroughly rinse with clean water Wiping with a soft, absorbent cloth 	 Washing with water with a «cleaner and shine remover» added Thoroughly rinse with clean water Wiping with a soft, absorbent cloth 	■ Contact a specialist company



FREQUENCY OF CLEANING (As an indication)

IN RURAL OR SPARSELY POPULATED URBAN AREAS

Where there are no aggressive elements in the environment, the frequency of maintenance for surfaces regularly washed by rainwater is generally annual.

IN URBAN, INDUSTRIAL OR MARINE ENVIRONMENTS

- Require quarterly or semi-annual maintenance depending on the amount of product exposure.
 - In areas close to chemical industries or by the sea, the operation should be repeated every month to avoid stains caused by salt or other corrosive materials.

THE CLEANING **OF PARTS NOT NATURALLY WASHED BY RAINWATER**

• (Areas with high traffic and high loads such as building entrances, shop fronts, etc.) must be carried out more frequently than for exposed surfaces.

Reference:

https://www.aluminum.fr/aluminum/proprietes-aluminum https://www.lenntech.fr/periodique/elements/al.htm https://www.futura-sciences.com/sciences/definitions/chimie-aluminum-14515/ https://www.adal-aluminum.fr/entretien-de-laluminum-anodise/

