

CARE, CLEANING AND MAINTENANCE

ALUMINIUM FRAMING MAINTENANCE:

Your new Ezi Aluminium Systems product has been manufactured using the highest quality materials available to the Aluminium industry. Constructed from Architectural Grade Aluminium and incorporating high quality surface finishing and hardware, these products are highly corrosion resistant and exceptionally strong. With a moderate amount of maintenance, your Ezi product will retain its good looks, and resist the elements for years to come.

Ezi Aluminium Systems products are the subjects of years of development and are designed to resist corrosion and product failure, but as with all building fixtures, they require some maintenance to keep looking good and performing well. Depending on how harsh the environmental elements are, the maintenance period will vary. Very severe exterior environments usually occur at or near the beachfront in regions of rough seas and surf beaches. Refer the suggested maintenance table below.

Your Ezi Aluminium Systems product should only ever need to be washed down with a soft bristled brush using warm water and a mild detergent. Rinse well with fresh water to remove any detergent residue. Care should be taken to avoid excessive amounts of water entering rollers, locks and any other hardware. Strong detergents and abrasive cleaners should never be used to clean your Ezi Aluminium Systems product as these may scratch or damage the surface finish.

POWDER COATED AND ANODISED ALUMINIUM MAINTENANCE:

Powder and Anodic coatings should be cleaned and maintained in accordance with their relative standards: AS1231-2000 for Anodising and AS3715-2002 for Powder-Coatings.

Essentially the recommendations within these standards include:

1. Regularly* washing the finish with warm water containing a pH neutral; wetting agent or detergent.
 2. Use a non-abrasive fibre brush or sponge
 3. Thoroughly rinse with copious amounts of clean water immediately after every cleaning process
- * The above should be carried out during cooler temperatures and preferably in shade.
 * After cleaning, the Anodised Aluminium may be treated with a good quality wax polish (AS1231-2000, App.C)
 * However, if heavy soiling does occur, more regular cleaning is recommended.

Environment	*Minimum regular clean and check Interval
Non-hazardous	12 months
Tropical	9 months
Swimming and Leisure Pools	6 months
Marine	3 months
Industrial	3 months
Hazardous	1 month

Stubborn Residue

For the cleaning of greasy, oily, sooty substances or adhesive residue, the Powder coat suppliers suggest the use of White-spirits or Isopropyl alcohol in combination with using a soft cloth and gentle wiping. Nothing stronger is permitted for use. It is also suggested that a small non-visible area be tested initially to ensure that no colour change or damage will occur.

DO NOT USE:

- * Abrasive materials, tools or anything that may scratch
- * Strong acids or alkaline substances or other materials which can cause corrosion.
- * Strong solvents including; thinners, petrol, diesel, turps or kerosene.
- * Degreasers, pesticides, brand name lubricants or agents of unknown composition
- * Laundry or dish detergents, oven cleaners or other harmful agents
- * Agents on surfaces that are warmer than 25 DEG C during cleaning
- * On significant areas, agents that have not been successfully used before
- * Do not allow build up against the finish of; debris, agents or moisture, to reside for any extended period of time or allow immersion in soil, water or concrete.

HARDWARE MAINTENANCE:

Generic Primary and Auxiliary Locks, Hinges etc The following cleaning process is recommended:

- a) Cleaning should be done with a dilute solution of a mild liquid detergent in warm water. Avoid excessively hot solutions.
- b) Use a soft bristle brush or similar to clean the surface. Do not use abrasive tools.
- c) After cleaning, rinse surfaces thoroughly with fresh water.
- d) Do not use strong solvent type cleaners on surfaces. Where it is necessary to remove materials from the surface (such as adhesives and a solvent is necessary) the weakest possible solvent should be used. The only solvents recommended are methylated spirits, white spirits or Isopropanol. Ensure the contact time for the solvent is kept to a minimum and that the solvent is thoroughly rinsed from the surface. A small test area should be checked prior to solvent cleaning to ensure that no damage to the film or colour change will occur.
- e) Where more aggressive cleaning is required, a very mild abrasive such as a high quality automotive cream polish, used in accordance with the manufacturer's instructions, may be necessary. The use of strongly abrasive compounds such as cutting compounds is not recommended.
- f) The use of bore water for cleaning is not recommended due to its mineral content, as it can bring about staining of the coating and may instigate long term coating failure.
- g) Ensure cleaning fluids do not penetrate into the lock or cylinder.

The use of products with soft finishes; such as gold plate, lacquered brass or chrome plate, need special care. Dirt or other contaminants must not be allowed to build up on the surface, as these will readily discolour and impair the surface. Some change in colour, gloss or chalking may be expected dependant on exposure.

Key cylinders should be lubricated at least once a year or when there are signs of roughness when inserting or retracting the key. Remove any dirt, grime and salt deposits on and around the end of the cylinder barrel, and apply a small amount of powdered graphite to the key blade and insert the key into the lock barrel to maintain a smooth action.

Exposed mechanisms, such as chains or other exposed parts, should be cleaned with a non-metallic brush. Apply a small amount of preferably Teflon based lubricant or alternatively light sewing machine 5W mineral oil to lubricate moving parts and prevent corrosion of exposed metal surfaces. Be careful not to apply an excessive amount of lubricant as this will have a detrimental effect of adhering dust to these surfaces, potentially reducing their life.

Bi-Folding Hardware

Tracks and bearings Using a spatula or similar (not your finger), apply a small amount (typically a 1/4 teaspoon) of white petroleum jelly (Vaseline) or similar lubricant to the inner lip of each side of the track. Ensure that the wheels pass through the lubricant and it is distributed evenly along the track. Put additional lubricant around bearings. Lubricant reduces wear, improves smoothness and further protects against corrosion of track and bearings. Stainless-steel bearings are manufactured from hardening-grade stainless-steel and although this material performs considerably better than plated steels, it is still susceptible to corrosion unless maintained adequately.

Hangers, pivots and brackets A light spray application of a corrosion preventative such as Inox, followed by a light wipe with a dry cloth to remove excess, is recommended. Exposed surfaces should first be wiped down with warm soapy water and a soft rag, and then rinsed clean before applying preventative.

Hinges Wipe down the visible surfaces with warm soapy water on a soft rag and then rinse off by wiping with a clean damp rag. Application of a thin film of light machine oil or Inox will help to maintain the original lustre of the metal finish.

Dropbolts Spray application of a suitable lubricant such as Inox to the sliding pin inside the bolt and graphite powder to the lock cylinder is recommended. There are access holes or slots on all dropbolt products so that this can be done without removing the locks from the doors.

Solid brass Polished solid brass is supplied as a natural, unlacquered finish. The finish can either be left to develop a naturally aged patina or polished with any commercial brass polish.

SUGGESTED MAINTENANCE PERIOD TABLE

Environment	Recommended Maximum Maintenance Interval
Moderate Mild	Three Months to Six Months
Tropical / Severe	Two to Four Weeks

Environmental Definitions

Mild: Being rural, away from the coast and remote from industry and urban activity.

Moderate: Being mainly urban, inland and away from heavy industry.

Tropical/Severe: Being coastal/marine, subject to salt deposition and within 15Km of the Eastern Coast, or 10Km of the Western Coast of Australia.

NOTE:

The Care and Maintenance details shown above are general in nature and are offered as a guide to the product end user. Specific Care and Maintenance guides for specialised, "Name Brand" hardware products such as Locks, Closers, Hinges and so forth can be obtained from the individual product manufacturer. Where possible Ezi Aluminium Systems have tried to cover most areas of Care and Maintenance but cannot be liable for errors, omissions or conflicting information.

STORAGE:

- Material should be stored away from excessive dust or fumes.
- Avoid storage near gas or oil heaters which produce moisture as well as pollutants.
- Storage spaces should be dry and well ventilated at a constant temperature above 16C.
- Superficial corrosion can be easily removed by hand cleaning with white spirit.
- Storage staining and corrosion will not usually have any detrimental effect on the mechanical properties of the material.

A more troublesome form of staining is **water marking**. This can occur;

As a direct water stain, which is non-metallic in appearance - usually whitish – and caused by the entrapment of moisture between sections of closely packed material. It is a superficial condition only and if a shipment arrives in a wet condition, it should be thoroughly dried before storing. If moisture is removed within a short period after the metal becomes wet, no stain will result. Once dry, the metal should not be stored near such obvious water sources as steam and water pipes and should be kept at a reasonable distance from open doors and windows.

As condensation, which is perhaps the most troublesome cause of water stain. It is important to ensure that a sudden fall in temperature or an increase in humidity does not occur in the places of storage. Boxes of aluminium should never be left in the open. It is, however, easily avoided by spacing the sections and ensuring that moisture cannot bridge the gap. The stain can be removed by wire-brushing and chemical treatment.

Vertical racks are preferred for storage. If horizontal storage is unavoidable, care should be taken not to overload racks and to support light sections adequately to avoid local damage at the points of support. Inspection Should Be Carried Out At Regular Intervals.