



G T Glassmasters Limited
Unit 2, The Great Western Railway Yard
St Agnes
TR5 0PD
01872 273299
info@gtglassmasters.co.uk

Maintenance Guide

The following has been prepared as a reference guide for the end customer or homeowner to ensure the smooth running and efficiency of their aluminium product. Any given guarantee or warranty may be compromised if the following guidance is not adhered to.

G T Glassmasters Limited reserves the right to charge for any materials and labour within the given guarantee period if it is deemed appropriate and regular maintenance of the supplied product has not been carried out in accordance with the guidelines.

Aluminium Windows & Doors

Cleaning of windows & doors

The window/door surfaces and inner chambers should be cleaned using warm soapy water or a mild diluted detergent.

The surfaces should be cleaned using a soft cloth, sponge or a soft natural bristle brush. All areas to be thoroughly rinsed and dried after cleaning.

Finishes Polyester Powder Coating Polyester powder coat paint is an organic finish that requires regular cleaning and maintenance to ensure it keeps its decorative and protective qualities.

The frequency of cleaning depends on such factors as:

- The building's surrounding environment (for example, marine alkaline, acid, Industrial etc.)
- The varying levels of atmospheric pollution

- The prevailing wind direction
- Exposure to airborne debris such as sand or salt, which may cause erosive wear.

Cleaning frequency also depends on the desired standard of appearance and also the need to remove deposits, which could cause damage after prolonged contact with the finish. In an industrial environment, **the normal interval between cleaning should not be more than every three months**. Where there is a high degree of industrial pollution or a hazardous atmosphere, the periods between cleaning should be reduced. If the atmosphere is non-hazardous (for example in rural or normal urban locations), the period between cleaning can be extended to a maximum of 18 months (or more frequently if heavy soiling occurs).

Where a site is subjected to any unusual environment factors, or is close to salt water, we will seek specialist advice and advise accordingly.

Powder coat paint finishes should be kept clean by **regular washing using a solution of warm water and a mild detergent**. Use a soft cloth or sponge and never use anything harsher than a natural bristle brush. Where atmospheric pollution has caused heavy soiling of the powder coat paint, use white spirit for cleaning. Under no circumstances should abrasive cleaners or any cleaner containing ketones, esters or alcohols be used. Anodised Aluminium finishes need regular maintenance to obtain their original appearance. As with all aluminium products, **acid or alkaline industrial cleaners should never be used**.

Drainage Channels

Most window and door frames have drainage channels and outlet slots located in the cill or base of the frame. These channels and outlet slots must be kept clear of dirt and grit to enable free flow and efficient dispersal of any water. Blockages to the drainage channels can cause major water ingress issues and severely effect the functioning of the window / door. Regular cleaning and wiping are vitally important.

General Hardware Maintenance for all windows & doors

Handles

Handles may be cleaned with warm soapy water or a mild diluted detergent using a soft cloth or sponge. It is important to thoroughly rinse and dry the hardware after cleaning. Pivot points of handles should be lubricated periodically with light machine oil such as 3 in 1 or WD40. The tightness of all fixing screws or rivets should be checked periodically one year after installation and thereafter annually. Over tighten of handle fixing screws can put too much strain on the locking mechanism's gearbox and impair the function of the lock. Windows and doors which are not in frequent use should be opened and closed periodically to check the operation of the hardware.

Locks

All locking mechanisms should be kept free of dirt and grime and lubricated with light machine oil such as 3 in 1 or WD40. Locking parts exposed when the window/door is open, including strike/face plates, locking cams and hook bolts should be wiped clean of residue lubricant and grime. These mechanisms should then be lubricated using a light machine oil.

Locking keeps should be lubricated with petroleum jelly from time to time. Always ensure excess oil is wiped away. One year after installation and thereafter annually, the moving parts of locking mechanisms should be lubricated with light machine oil as 3 in 1, or WD40. Aluminium windows and doors are

manufactured in accordance with BS 4873 2009 "Specification for aluminium alloy windows". They are designed and constructed to meet specific levels of performance.

Hinges

Friction hinges, opening restriction arms and safety catches should be lubricated periodically with light machine oil such as 3 in 1 or WD40. At least every three years the hinges should be cleaned and the pivot joints re-lubricated. For best performance of friction hinges, any dust or debris must be removed from tracks, sliding shoes and end points. Some types of hardware are designed to operate freely whereas others are designed to remain in a required position, by friction. The former may need an occasional application of oil on the rotating or sliding surfaces. The others, together with freely operating hardware which incorporates plastic bearing surfaces, should not be oiled.

Door Closers

The closing and latching speeds of mounted or concealed overhead door closers can be adjusted to suit your requirements. Checks should be carried out periodically to ensure that the bottom pivot and that the top arm fixings are tight. To do this, it may be necessary to remove the door and we advise you to consult a professional door maintenance company to undertake such work.

Gaskets

Gaskets (some will only be visible with window/door open) may be cleaned using warm soapy water or a mild diluted detergent using a soft cloth or sponge. When cleaning, ensure that any weather seals do not become dislodged from their grooves. If this happens, slide the seal back into position immediately to avoid possible damage when the window/ door is closed. If any weather seals are damaged, or if draughts are felt around the glazing, ensure prompt replacement by contacting your installer.

Glass

The frequency of glass cleaning varies from, for example, the daily cleaning of shop windows to the occasional cleaning of a factory or industrial building.

Glass may become soiled by pollutants, which include dust, grit, smoke, salt in a marine environment and gas particles (particularly sulphur dioxide). Pollution in towns is caused by the burning of fossil fuels, diesel fumes and the fumes from industrial processes.

Glazing becomes soiled to a varying degree according to the locality, the inclination of the glass surface, its texture and whether it is exposed to the washing action of rain. Rain, however, is never in itself sufficient to keep the exterior clean. Atmospheric pollution influences the exterior soiling of glazing, whilst the internal surfaces can be soiled by pollution generated from the building, this can become a major factor in some industrial locations.

The glass used in most double-glazed units can be easily scratched so we recommend that rings etc. be removed prior to cleaning. Glazing can often be cleaned satisfactorily using clean water. Apply liberally with a sponge and finish with a dry cloth. Squeegees can be used, and long handled squeegees can be used for larger or inaccessible windows.

If windows face busy roads, they may suffer from soiling due to traffic fumes. Detergent may be added to the cleaning water in small quantities. Although paraffin can speed up the cleaning process, the glazing will soon develop a rainbow-like discoloration.

If the glazing is very soiled, it may require treatment with a diluted solution of ammonia or soda. Checks should be made to see whether the cleaning materials will have an adverse effect on the fabric of the building or the window frame itself. After cleaning with these products, wash down the areas with clean water.

Scratches can usually be removed with jeweller's rouge or a similar rubbing compound. For cleaning and maintenance of specialist glass products, please consult a glazing company.

Condensation

Water vapour is present in the home due to day-to-day activities which create steam such as cooking, bathing, washing, boiling water etc.

This water vapour is undetectable when carried in warm air, but it condenses into water droplets when it encounters cold surfaces such as glass. Normally, water vapour is controlled through natural ventilation via airbricks and chimneys but conservation measures have led to more efficient sealing of buildings. This may result in trapped water vapour and increasing problems with condensation.

Condensation is best controlled by ventilation and this is achieved by opening windows, fitting extraction units, trickle vents on windows or by fitting wall vents to provide airflow. Some heat should always be maintained in the building during cold weather. The temperature may be increased in areas where condensation is a particular problem.

If possible, internal doors to kitchens and bathrooms should be kept closed and sealed against draughts to prevent excessively moist air being transferred to other areas. Modern windows should have trickle (night) ventilation facilities to provide air circulation. Curtains should be a minimum of 150mm away from the window to ensure airflow, with suitable gaps.