ALUK®
INNOVATIVE BUILDING SYSTEMS

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OPERATION & MAINTENANCE GUIDE

GUIDE TO THE OPERATION, CARE AND MAINTENANCE
OF ALUMINIUM WINDOWS & DOORS

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OPERATION

CASEMENT WINDOW

Casement windows can be supplied with a single point or multi point lock. Although the principles of handle operation are the same, they offer varying degrees of security.

To operate a Casement window, unlock with key and depress button. Turn the handle through 90° to disengage the locking mechanism and open the window by pushing outwards. Reverse process to lock window.

Most windows have an intermediate or night vent locking position. This can be achieved by unlocking the window as above and pushing out slightly (approx 50mm) and then re-engaging the lock, via the handle, into the second locking position.

TILT BEFORE TURN WINDOW

Tilt and turn windows have two modes of operation; a tilt mode for ventilation and a turn mode for cleaning or emergency exit use.

Locking is by a number of cams (espagnolettes) located on a sliding mechanism around the perimeter of a window vent. When the window is shut, with the handle in the closed position, the cams are engaged in keeps fitted around the window frame.

Note that these windows can be supplied in either tilt-before-turn or turn-before-tilt mode.

If you are in any doubt as to the sequence of operation, please contact your installer.

The handle of a tilt-before-turn window can be placed in three positions CLOSED, TILT or TURN. The window must always be fully shut before changing the handle position, in the closed position, the handle points verticallly downwards.

To TILT the window, turn the handle through 90° until it is horizontal then pull the window inwards. The base of the window remains hinged to the frame whilst the top tilts inwards for ventilation.

To TURN the window from the TILT position, close the window and turn the handle 90° to the vertically upward position and pull the window inwards. The side remains hinged to the frame whilst the window can be opened inwards to any required position.

The window can be locked by pulling the window shut and turning the handle so that it points downwards to the floor.

In an opened tilt position this would be a downward handle turn of 90° and in a turn position the window should be pulled closed and the handle be turned 180° downwards to the locked position. Secure using the key and remove the key when not in use.

REVERSIBLE WINDOW

Reversible windows are top hung, outward projecting and are fully reversible. When in operation, the opening vent remains outside of the building structure.

To operate a reversible window, disengage the locking mechanism by turning the handle 90° upwards and start to push the window out. If the window has been fitted with security gearing, the window will lock-out at approximately 100mm. This is a security and safety restrictor device. To allow the window to travel past this point you will need to push the release lever located inside the window at the bottom of the hinge arm. Continue to push the window out to 90° and it will then begin to reverse back in on itself until it locks out in its fully open position. To lock the window, simply reverse the process.

The window will re-engage into the 100mm restricted position until the lever is depressed and the window is pulled closed. Turn the handle 90° downwards to engage the lock and secure with the key. Always remove the key away from the window when not in use.

RESIDENTIAL DOOR

Residential doors can be fitted with a variety of hardware and locks and you should discuss these options with your fabricator/installer prior to manufacture and installation.

To operate a Residential door, unlock with key and turn the handle 90° downwards to disengage the locking mechanism and open the door by pushing or pulling, depending on configuration.

To lock, close door and turn handle 90° upwards from horizontal position. This will engage the multiple locking points and allowing the door to be securely locked using the key. Always remove the key from the door when not in use.

INLINE SLIDING DOOR

Inline sliding doors can be fitted with a variety of hardware and locks and you should discuss these options with your fabricator/installer prior to manufacture and installation.

To operate the inline sliding door, unlock with the key provided and turn the locking lever upwards 90° to disengage the lock. Slide the door open by gently pulling the handles in the direction the door is to slide. The door will slide open until it is stopped by the rubber door stops located on the fixed (non-sliding) part of the door.

To ensure the smooth and consistent operation of the door, avoid excessive force when opening and closing the door.

To close and lock the door, simply reverse the process ensuring the door is fully engaged into frame before moving the locking lever back to its original, locked position. The lever should smoothly relocate into the locked position and should not be forced. Once the lever is in position, securely lock the door with the key and remove from the door when not in use.

COMMERCIAL DOORS

Commercial doors can be fitted with a variety of hardware and locks and you should discuss these options with your fabricator/installer prior to manufacture and installation.

To operate a standard commercial door, simply unlock with the key and, depending on configuration, push or pull the door open. Most standard commercial doors will be fitted with concealed or face mounted door closers.

When the door is opened, the closer will automatically bring the door back to its closed position without any handling. The speed at which the door self-closes can be adjusted, please refer to door closer maintenance.

To lock the door, allow the door to self-close and locate in position. Put the key in to the lock and turn to engage and secure the door. Always remove the key when the door is not in use. If your door is fitted with automatic gearing and electronic access systems, please refer to the manufacturers guide to operation.

MAINTENANCE

PROFILES

PROFILES

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 nonhazardous (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, your installer should be consulted for specialist advice.

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

Anodised Aluminium finishes need regular maintenance to obtain their original appearance. This is best undertaken as part of the regular window cleaning schedule, but not less then every three months. All that should be required is a mild detergent in warm water. Accumulated deposits can be removed carefully with a nylon brush or super fine Scotchbrite type pad. As with all aluminium products, acid or alkaline industrial cleaners should never be used. Certain specialist abrasives or non-etch chemical cleaners may be used in certain instances. These should be tested on a concealed area of aluminium prior to use. White spirit, turpentine or kerosene can be used on any areas contaminated with acid or alkaline additives.

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 to enable free flow and efficient dispersal of any water.

HARDWARE

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. The tightness of all fixing screws or rivets should be checked periodically. Over tighten of handle fixing screws can put to much strain on the locking mechanism's gearbox an 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" 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. Please see the manufacturer's leaflet for details. 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.

Glass may become soiled by pollutants, which include dust, grit, smoke, gas (particularly sulphur dioxide) and acid or alkaline deposits. 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. Note however that the use of long handled squeegees horizontally is not recommended.

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 if it will be necessary to provide overhead protection for passers-by or whether the cleaning materials will have an adverse effect on the fabric of the building. 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 refer to manufacturers guide lines.

CONDENSATION

Water vapour is continually present in the atmosphere and in the home this natural water content is increased by 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 comes into contact with cold surfaces such as glass. Normally, water vapour is controlled through natural ventilation via airbricks and chimneys etc. but conservation measures have lead 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 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. Bedroom windows should have night ventilation facilities to provide air circulation. Curtains should be a minimum of 150mm away from the window to ensure airflow, with suitable gaps.