



CLEANING AND MAINTENANCE GUIDE
ALUMINIUM WINDOWS, DOORS AND LOUVRES
GLAZING AND POWDER COATED FRAMES



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This report is offered as general information only. Specific advice on the cleaning of different types of glass should always be obtained from a reputable glazier or professional window cleaner before any glass cleaning is undertaken.

RECOMMENDATIONS DURING CONSTRUCTION

Always follow manufacturer's installation and cleaning instructions.

It is recommended that glass be protected from the risk of damage and contamination caused by building materials and other exposure risks during construction, this will simplify cleaning at the end of the project. If the glass cannot be protected during construction, then the glass and frames should be cleaned frequently to ensure no permanent damage occurs.

Construction dust, leachate from concrete and rusting from steel can contribute to the formation of mild chemical reactions; this may stain or otherwise damage the surface of glass, voiding warranties.

Glass should be cleaned using only cleaning materials which are free of grit and debris (to avoid scratching and marking of the glass surface).

Only detergents and cleaning solutions which are recommended for cleaning glass should be used. Mild detergents or organic cleaners without sulphates are preferable.

Temporary screens must be installed if welding, sandblasting, floor sanding, cuffing or other potentially damaging construction practices takes place near the glass.

Glass installations which are adjacent to concrete (e.g. concrete slab floors) require extra care and cleaning due to the abrasive nature of concrete dust.

All tradespeople should be advised to be aware of damaging glass and windows and to leave in place any materials protecting the window or glass during the construction period.

PAINT DAMAGE

Do not remove paint spots using a sharp razor blade or metal scrapers. The use of these items will cause damage to the glass. Instead, investigate solvents or graffiti removal materials, ensuring that they will not damage the glass before use.

Warning: - *Global Reach does not warrant damage caused by razor blades or metal scrapers*

What to do if glass breakage occurs?

If glass is damaged or broken, ensure that experienced glaziers are engaged to rectify the situation. Glass can be a safety hazard if not handled properly. - **Do Not Attempt** to remove or replace broken glass unless you are experienced in doing so, broken glass can be extremely dangerous and cause serious injury or death.

PROFESSIONAL CLEANERS

Professional glass cleaners have significant experience and access to specialised equipment, materials, and methods which the general public may not. Professional glass cleaners are acknowledged experts in the cleaning of glass, Global Reach offers this information as general advice only. Professional glass cleaners should consider the following information as part of the development of their own cleaning processes and procedures if desired.



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LOW EMISSIVITY COATED GLASS (LOW E)

Low E coated glass is cleaned differently to ordinary glass. It has a very thin metal coating on the interior glass surface. This hard and durable coating gives the product its improved thermal insulation and solar control performance compared to ordinary clear glass. These guidelines are recommended for the most effective and appropriate hand cleaning results.

ROUTINE CLEANING

Hand cleaning of the coated (interior) surface, to remove accumulated dirt, dust or fingerprints, can be done using several different glass cleaning products. The exterior surface of the glass may be cleaned in the same fashion as ordinary glass.

PROCEDURE:

- Ensure jewellery and watches are removed and gloves should be worn to avoid scratching the surface of the glass while cleaning. Scratches that occur from foreign objects will be permanent and are unable to be fixed.
- Spray the glass surface with the cleaning solution or with a cloth saturated with the cleaning solution. Be generous with the amount applied.
- Wash the wetted surface with a clean, lint free towel or cloth.
- Wipe with a clean, lint free towel or cloth to dry. Utilising a squeegee is not recommended and could increase the risk of damage to glass and as such should be avoided if possible. Do not use a squeegee on the coated (interior) surface of the glass.
- Stop wiping when the glass is almost dry and there is a uniform residue of moisture left on the glass surface to avoid streaking. The residue will evaporate leaving a clean surface.

RECOMMENDED PRODUCTS:

- **Windex® Multi-Surface Cleaner** (colourless liquid) (Australia) or **Mr. Muscle® Surface and Glass** (New Zealand) (clear liquid available from Supermarkets), produced by SC Johnson & Son Pty Ltd.
*Other **Windex®** branded varieties may be used but may lead to problematic streaking of the glass OR
- **A mixture of one-part vinegar with ten parts water.**

There are many commercially available vinegar-based glass cleaners in addition to the above, that have generally been able to provide a clean, streak free glass surface. Global Reach does not recommend the use of ammonia-based and alcohol-based glass cleaners because they tend to leave visible streaks.

SPOT CLEANING

Sometimes spot cleaning may be required to remove stubborn dirt or foreign materials which stick to the surface of the glass. Spot cleaning products can work to remove grease, oil, tape adhesive, and crayons or other waxy materials as well as paint and marks from plastics

PROCEDURE:

- Ensure jewellery and watches are removed and gloves should be worn to avoid scratching the surface of the glass while cleaning. Scratches that occur from foreign objects will be permanent and are not able to be fixed.
- Apply a small quantity of the cleaner listed below to a clean, wet cloth or towel.
- Apply to areas of glass needing spot cleaning.
- Wipe using a dry, clean, lint free towel or cloth followed by a routine cleaning procedure.



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RECOMMENDED PRODUCTS:

- **Methylated Spirits** (solvent available from supermarkets and hardware stores) Please use strictly in accordance with manufacturer's recommendations and warnings.

SPECIALISED CLEANING

Do not use razor blades, steel wool, scouring bristles or other metallic or abrasive objects on the coated surface. This may damage the surface and consequently void the warranty. If metallic objects contact the coated surface, a thin layer of metal from the object may be deposited onto the surface which results in a discoloured stain. This is difficult to remove using routine cleaning procedures.

PROCEDURE:

- Ensure jewellery and watches are removed and gloves should be worn to avoid scratching the surface of the glass while cleaning. Scratches that occur from foreign objects will be permanent and are not able to be fixed.
- Carefully follow the chemical manufacturers' use and safety instructions. If there are none, pick a brand that has instructions and safety precautions or contact the manufacturer before use or application.
- Apply a small quantity of the specialised cleaning product listed below to a wet, clean cloth or towel - use only on the areas of glass needing cleaning.
- Wipe using a dry, clean, lint free towel or cloth followed by a routine cleaning procedure.
- Ensure that the cleaner does not come into contact with framing materials.

RECOMMENDED PRODUCTS:

- **Hydrochloric Acid** (available from hardware stores).
Before using Hydrochloric acid on the glass, ensure that it has been cleaned with clean water and a lint free towel or cloth to remove all loose debris. Refer to the manufacturer's handling and safety instructions and trial in an inconspicuous location first. After cleaning the glass, ensure that the area has been neutralised by rinsing with clean water and a lint free cloth or towel.

Warning - Ensure surrounding materials are protected from Hydrochloric Acid spills. If the acid spills on frames, sill, floors and/or other materials or unprotected skin please follow manufacturer's safety instructions immediately.



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TOUGHENED GLASS

The cleaning of toughened glass requires special consideration. The glass surface on the opposite side to the Safety Compliance Stamp may, as a consequence of the manufacturing process, have what's referred to as 'pickup' on the surface. 'Pickup' is a deposit of very small particles of glass which are fused on the glass surface. It is important during the cleaning of toughened glass, not to dislodge these particles, otherwise scratching may result.

Blades or scrapers have been known to dislodge 'pickup' from the glass surface, permanently damaging the surface of the glass. Only a soft cleaning cloth is recommended for the cleaning of toughened glass so as not to dislodge 'pickup'. It is suggested that professional cleaners consult with their suppliers as to the suitability of available cleaning equipment, materials, and methods before attempting to clean toughened glass.

Warning: - Global Reach **does not** warrant damage caused by razor blades or metal scrapers.

OTHER CONSIDERATIONS & IMPORTANT NOTES:

Do not use cleaners containing **Hydrofluoric** or **Phosphoric acid**. They are corrosive to the glass surface.

Do not clean the glass when the glass is hot or in direct sunlight.

Do not allow cleaning solutions to contact the edges of laminated glass, Insulating Glass Units or Mirrors.

Do not store or place other materials in contact with the glass. (This can cause damage or create a heat trap leading to thermal breakage).

Abrasive cleaners, powder based cleaners, scouring pads or other harsh materials should not be used to clean windows or other glass products.

Avoid causing extreme temperature changes to the glass as this may lead to thermal fracture of the glass, i.e. do not splash hot water on cold glass or freezing water on hot glass.

Some tapes or adhesives can stain or damage glass surfaces. Avoid using such materials unless they are known to be easily removed.

In areas where glass is exposed to sea salt spray, we recommend higher levels of regular cleaning, particularly where the internal glass surface (low e coating) is exposed to indirect sea salt spray.

POWDER COATED FRAMES

Powder coating is one of the most durable product coatings available, however it does require a little care and maintenance in order to keep performing and providing you with many years of service. To extend the life of your powder coated product and comply with warranty requirements for your powder coated aluminium framing system, a simple regular cleaning and maintenance program should be implemented.

PROCEDURE:

- Carefully remove any loose surface deposits with a wet sponge.
- Use a soft brush (non-abrasive) and a solution of diluted mild detergent and warm water e.g. PH neutral liquid dishwashing detergent to remove dust, salt and other debris. (DO NOT use solvents.)
- Thoroughly rinse surfaces with clean, fresh water after cleaning to remove any remaining residues.



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OTHER CONSIDERATIONS & IMPORTANT NOTES:

Please mask your joinery when building, renovating, plastering, or painting.

If paint splatters or sealants get on frames or glass, do not allow to dry, remove immediately.

DO NOT use turpentine, white spirits, thinner or other aggressive solvents on powder coating (*these may be harmful to the extended life of the powder coated surface and should be avoided as the damage may not be visible immediately and may take up to twelve months to appear*).

Use isopropyl alcohol or Methylated spirits and rinse with warm soapy water.

DO NOT rub powder coating excessively, especially metallic finishes.

Use approved tapes only to mask joinery.

Use masking tapes in accordance with manufacturer's instruction.

Keep sunscreens away from powder coating, some sunscreens adversely affect painted finishes.

It is recommended that cleaning of powder coated frames be undertaken at least once every 6 months in low corrosivity zones and at least once every 3 months in areas of medium to high corrosivity (i.e. geothermal, light Industrial, inland coastal and/or seashore with mild to medium sea spray).

Keep sliding or stacking windows and door tracks free of debris (dirt, sand, etc.), as a buildup of grit may reduce the life of the rollers. Global Reach recommends vacuuming the tracks regularly and wiping with a damp cloth when required to remove any hard to remove debris.

Further Information:

Industry information for the care of windows is also available from:

www.awa.org.au

The following industry standards may be referred to:

- AAMA609
- AAMA610
- AS3715

ABOUT THIS ADVICE

The information contained herein is offered as a general guide only. Specific advice should always be obtained from a reputable glazier or professional window cleaner before undertaking any cleaning. This guidance does not preclude the use of other methods, materials or equipment, however, the user should undertake careful evaluation and make appropriate enquiries of the suitability of alternative methods, materials or equipment before using them. Global Reach has taken all reasonable care in producing this document however, makes no recommendations or warranties, express or implied, as to the accuracy, reliability or completeness of, and disclaims all liability, direct or indirect and whether or not arising out of the negligence, default or lack of care of Global Reach for any loss or damage (whether foreseeable or not) suffered by the recipient or any other person arising out of or in connection with any use or reliance by any of them on this document. Liability which cannot legally be excluded, is limited to the maximum extent possible.

