

## **Cleaning & Maintenance Advice – Ordinary Glass – Clear, Toned and Super Toned.**

*Viridian VFloat™*

*Viridian VLam™*

*Viridian IntruderGuard™*

*Viridian AssaultGuard™*

*Viridian VTough™*

*Viridian VLam Hush™*

*Viridian LuminaCloud™*

*Viridian SpectraPrism™*

*Viridian SuperClear™*

*Viridian ThermoTech™*

*Viridian ThermoTech E™*

*Viridian PerformaTech™*

*Viridian LightBridge™*

*Viridian PyroGuard40™*

### **Cleaning of Glass**

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



### **Routine Cleaning**

Hand cleaning of the glass surface, to visibly remove accumulated dust or fingerprints, can be accomplished using a number of different glass cleaning products.

#### **PROCEDURE:**

- While cleaning ensure jewellery and watches are removed and gloves should be worn to avoid scratching the surface of the glass. Scratches that occur from foreign objects will be permanent and are not repairable.
- Flood the glass surface with the spray-on cleaning solution or with a cloth saturated with the cleaning solution. Be generous with the amount of solution applied.
- Scrub the wetted surface with a clean, lint free towel or cloth.

- Wipe to dry with a clean, lint free towel or cloth. The use of a squeegee is not recommended and could increase the risk of damage to glass and as such should be avoided if possible.
- To prevent streaking, stop wiping when the glass is almost dry and there is a uniform residue of moisture left on the glass surface. The residue will quickly 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.**

*In addition to the above products, commercially available vinegar-based glass cleaners have generally demonstrated an ability to provide a clean, streak free glass surface. Viridian does not recommend the use of ammonia-base and alcohol-base glass cleaners because these products tend to leave visible streaks.*



## Spot Cleaning

Occasionally spot cleaning may be required to remove stubborn dirt or foreign materials which adhere to the surface. Spot cleaning products work to remove markings from grease, oil, tape adhesive, and crayons or other waxy materials as well as paint and rub-off marks from plastics.

## PROCEDURE:

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

## RECOMMENDED PRODUCTS:

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

## 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 called '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 of the glass surface may result.

Blades or scrapers have been known to dislodge 'pickup' from the glass surface permanently damaging the surface of the glass. The use of a soft cleaning cloth is only recommended on toughened glass as to not 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:** - Viridian **does not** warrant damage caused by razor blades or metal scrapers.

## OTHER CONSIDERATIONS & IMPORTANT NOTES:

- Do not use cleaners which contain **Hydrofluoric** or **Phosphoric acid** as 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 material in contact with the glass. (This can damage the glass 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.

### 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. As an alternative, investigate solvents or graffiti removal materials, ensuring that they will not damage the glass.

**Warning:** - Viridian **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 injuries 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, Viridian 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.

### RECOMMENDATIONS DURING CONSTRUCTION

- Always follow manufacturer's installation and cleaning instructions.
- It's recommended that glass be protected from the risk of contamination caused by building materials and other exposure risks during Construction, this will greatly simplify the glass cleaning task 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.

#### ABOUT THIS ADVICE

This information is offered as a general guide only and specific advice should always be sought 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 suitable enquiries of the suitability of alternative methods, materials or equipment, before using them. Viridian has taken all reasonable care in producing this document, however Viridian makes no representations 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 Viridian 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.

**October 2017**