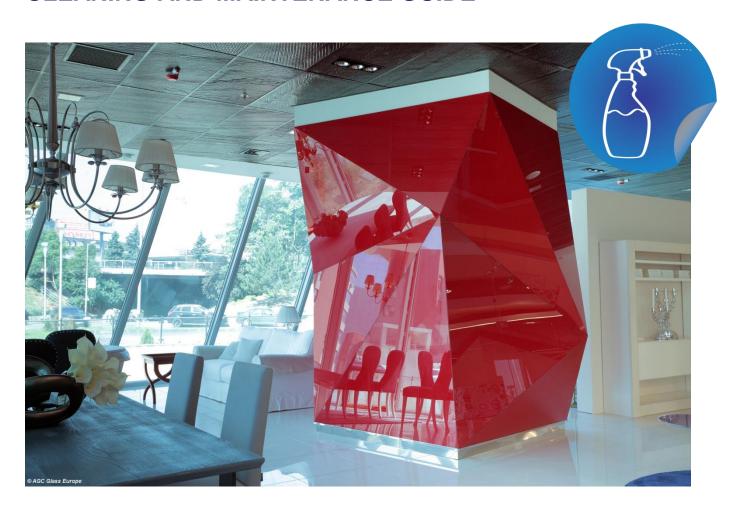
AGC DECORATIVE GLASS PRODUCTS FOR INTERIOR USE

CLEANING AND MAINTENANCE GUIDE



VERSION 2.0 - MAY 2015

This version of the guide replaces and cancels all previous versions.

Please check www.yourglass.com regularly for any updates.

Preliminary Important Instructions

Carefully read this manual before any cleaning and maintenance of decorative glass

Glass is, by its very nature, durable, tough and easy to maintain. By following the guidelines in this document, you can ensure that it stays clean and bright for many years once installed.

- 1. Execute the cleaning and maintenance of glass in safe conditions.
- 2. Carefully read the manual of the chemical agents and detergents you are going to use and comply with the related instructions.
- 3. All products containing hydrofluoric acid, fluorine, chlorine or ammonia derivatives should not be used as they can damage the decorative coating and/or the surface of the glass.
- 4. Highly acidic and alkaline products are prohibited, as they can abrade the glass surface.
- 5. The surface of etched glass should always be wet cleaned on the entire surface never perform spot cleaning.
- **6.** Do not wash interior decorative glass when it is fully exposed to the sun or a nearby heat source. Avoid washing it when it is too cold or hot.
- 7. Take advantage of the washing process to inspect the seals, drainage and frame.
- 8. Make sure that cloths, squeegees and other tools you are using for cleaning are in good condition at all times.

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Scope:

This document gives recommendations on how to maximize a qualitative cleaning and maintenance of AGC decorative glass products for interior use, from construction phase to after installation life.

1. PREVENTION

Taking steps to prevent the build-up of dirt is the best way to prevent cleaning problems and lowering cleaning costs. For example:

During the design phase:

- Make sure that water drainage and discharge systems are in place to prevent runoffs of eventual polluted water over the glass.
- Make sure that it is possible to gain access to the decorative glass so that it can be cleaned.

During the installation phase:

- Prevent runoff from plaster, concrete, rust, excessive dust, etc.
- Prevent pollution and spatters of paint, facade treatment products, etc.
- Prevent metal from welding or grinding from coming into contact with the glass. This kind of damage cannot be repaired.
- Where necessary, protect the glass with a tarpaulin or plastic sheet, making sure to provide a dry, well ventilated air space.
- Follow the glazing instructions (see www.yourglass.com).

2. CLEANING DURING CONSTRUCTION PHASE

Glass can get dirty, especially during the construction phase of a building.

Corrosive contamination must be avoided at all times, especially from plaster, mortar, concrete and cement slurry, all of which are alkaline and therefore capable of corroding the glass surface.

Likewise, pollutions as silicone adhesives, paints and varnishes,... should be avoided.

Any such impurities must be **washed off the glass immediately, already during the construction phase itself**. To do so in the right way, please make reference to § 3. here below.

To protect the glass during construction, AGC recommends covering installed glass with sheets of plastic film.

3. INITIAL CLEANING AFTER THE GLASS IS INSTALLED (END OF PROJECT)

When glass is cleaned for the first time after being installed (end of project), it may be particularly dirty.

We recommend the following steps:

- Remove protective films, labels and adhesive cork or interlayers as soon as possible. If there is any
 difficulty in doing so, solvents such as isopropanol or acetone may be used.
- Fingerprints and grease or mastic stains can be removed with solvents such as acetone or methyl ethyl
 ketone (MEK) provided that these products do not touch the eventual painted or silvered back side of
 the decorative glass and do not attack the seals and penetrate into the rebate.
- Rinse thoroughly to remove as much dust as possible.
- Follow the normal cleaning steps (see § 4. here after). Examine any remaining dirty marks.
- Very carefully remove the majority of any remaining deposits on the glass side like sealing compound, putty, cement, etc. using a specially designed scraper or a razor blade. There is a risk of scratching the glass, so take great care at all times. This is especially true for coated glass, acid etched glass, and sand-blasted glass.
- Follow the special cleaning instructions where necessary (see § 6. here after).

4. NORMAL CLEANING

- All products containing hydrofluoric acid, fluorine, chlorine or ammonia derivatives are prohibited since they can damage the decorative coating and/or the surface of the glass.
- Highly acidic and alkaline products are prohibited, as they abrade the glass surface.
- In most cases, glass can be washed with plenty of clean water. Sometimes a bit of mild, neutral detergent or an appropriate commercial cleaning product can be added to the water. A squeegee or specially designed lint-free cloths are also used. Avoid scratching the glass surface. Do not try to remove impurities while the glass is dry.
- During the cleaning process, do not apply any excessive pressure, as this could result in scraping or
 origination of stains on the glass surface. The glass should be wiped until the cleaning agent is wiped-off
 uniformly. The more uniform the wet surface, the lower the danger of origination of stains. Never drywipe using an excessive pressure. Should some stains still originate, repeat this sequence.
- Once cleaned, the glass should be rinsed with clean water and wiped with a squeegee.
- When removing fat or greasy streaks (e.g. fingerprints), the cleaning agents should always be applied onto the full glass surface.

5. FREQUENCY

The frequency at which glass should be cleaned will depend on the surrounding environmental conditions and pollution levels. Glass gets dirtier in dusty or humid areas (e.g. kitchens, bathrooms, toilets, hair dressing saloons, gyms, operation rooms, ...), and public areas.

6. SPECIAL CLEANING

When normal cleaning is not enough, special cleaning can be undertaken to clean the glass side of your decorative glass:

- Remove oily spots and other organic pollution with solvents such as isopropanol or acetone applied with a soft, clean lint-free cloth, taking care not to touch the eventual painted or silvered back side of the decorative glazing.
- Remove other residue by lightly polishing with a suspension of cerium oxide in water (between 100 and 200 grams per litre).
- Where circumstances allow it, heavily polluted surfaces may be washed by using a high-pressure cleaning device (i.e. Kärcher) with water temperature of at least 30°C or by using a steam cleaner (hot water vapour).
- Rinse thoroughly and then follow the normal cleaning steps explained before.

7. CLEANING INSTRUCTIONS FOR SPECIFIC PRODUCTS

		Cleaning Instructions			
		Do NOT use abrasive cleaners or strong alkalis on the etched surface.			
		Do NOT use a razor blade, wire wool and the like.			
Matelux Matelux Anti-slip		Damage of etched surface from silicone or similar materials are usually irreversible. Best experience for cleaning off these materials is using a soft (non-abrasive) white eraser.			
Matelac		For etched surfaces, the recommended glass cleaning agents are the ones with			
Matelac T Lacomat		some content of alcohol like: • Clin by Henkel – window cleaner spray, with alcohol;			
acomat		 Vitro by Amstutz Produkte AG –windows and mirrors industrial cleaner (2-butoxy-ethanol). 			
	Etched surfaces should always be wet cleaned on the entire surface, never perform spot				
	cleaning.				
		Any scratching will penetrate the surface of the coating and cannot be repaired.			
Stopsol Supersilver Dachrome Design		Any excessive mechanical treatment might remove the coating in localised areas.			
		Avoid all contact with metal objects.			

			Avoid all chemicals that would attack the surface and damage it irreparably.
Mirox MNGE Mirox 3G			When cleaning the mirror, the edges must always be dried quickly and thoroughly.
Sanilam Easycut Oltreluce Silver Matelac Silver			Never use ammonia-based products or abrasive products (such as antilimescale products) to clean Mirox MNGE.
Mirox AB			The Mirox 3G mirror can be cleaned using standard cleaning products.
Lacobel Lacobel T			Special cleaning can be undertaken to clean only the glass side of your decorative glass.
Stratobel	Υ	Υ	When cleaning laminated decorative glass, the edges must always be dried quickly and thoroughly.

8. DISCLAIMER

This document gives recommendations on how to maximize a qualitative cleaning and maintenance of AGC decorative glazing products for interior use, from construction phase to after installation life.

The content of this "Cleaning and Maintenance Guide – Decorative Glazing" reflects our knowledge and experience at the time of publication. Every version of the "Cleaning and Maintenance Guide – Decorative Glazing" bears a reference to its publication date. The newest version of the "Cleaning and Maintenance Guide – Decorative Glazing" replaces all previous versions. Customers should be aware that the newest version may contain technical changes that must be taken into account when using AGC glass products. The latest version or a different language version of the "Cleaning and Maintenance Guide – Decorative Glazing" and our Warranty terms may be consulted on www.yourglass.com or obtained from your local AGC representative. Customers should always check whether an updated version of the "Cleaning and Maintenance Guide – Decorative Glazing" is available before using AGC glass products.

AGC's warranty on glass products shall only apply if the latest version of this "Cleaning and Maintenance Guide – Decorative Glazing", which may be updated from time to time, is used by the customer and if all relevant requirements, standards and regulations have been taken into account by the customer for the use of the glass products. AGC has made every effort to ensure the accuracy of the information in this "Cleaning and Maintenance Guide – Decorative Glazing", but it cannot be held liable for any oversights, inaccuracies or typographical errors.

Customers and glass fitters can always contact AGC's Technical Advisory Services (TAS) for further assistance if required. The glass fitter is entirely responsible for the final application, including the installation, cleaning and maintenance of the glass and the compatibility between the different materials used. AGC Glass Europe accepts liability for the product it supplies and for its general sales conditions.