

# DECORATIVE GLASS PRODUCTS FOR INTERIOR USE CLEANING AND MAINTENANCE GUIDE

VERSION 4.0 - MAY 2023

Your Dreams, Our Challenge

This version of the guide replaces and cancels all previous versions. Please check <u>www.agc-yourglass.com</u> regularly for any updates.

#### **Important Preliminary Instructions**

## Read this manual carefully before performing any cleaning or maintenance work on 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. Always clean and maintain glass under safe conditions.
- 2. Carefully read the manual(s) for any chemical agents and detergents used. Follow the instructions.
- 3. Products containing hydrofluoric acid, fluorine, chlorine or ammonia derivatives must not be used since 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 across 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 the cloths, squeegees and other tools you use for cleaning are always in good condition.

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### Scope :

This document gives recommendations on how to ensure the best possible cleaning and maintenance procedures for AGC decorative glass products for interior use, from the construction phase to the post-installation phase.

#### 1. PREVENTION

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

#### During the design phase

- Make sure that water drainage and discharge systems are in place to prevent runoffs of 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 paint spatters, 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 <u>www.agc-yourglass.com</u>).

#### 2. CLEANING DURING THE CONSTRUCTION PHASE

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

Care must be taken at all times to avoid **corrosive contamination**, especially from plaster, mortar, concrete and cement slurry, all of which are alkaline and therefore capable of corroding the glass surface.

Likewise, contamination from silicone adhesives, paints and varnishes should be avoided.

Any such impurities must be **washed off the glass immediately, during the construction phase itself**. To do so in the right way, please see section 3 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 they do not touch the painted or silvered back (if any) 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 section 4 below). Examine any remaining dirt marks.
- Very carefully remove any remaining deposits on the glass side, such as 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 sandblasted glass.
- Follow the special cleaning instructions where necessary (see section 6 below).

## 4. NORMAL CLEANING PROCEDURE

- 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 or glass cleaner and a soft sponge or rubber squeegee. AGC provides a soft sponge and glass cleaner in its FIX-IN Cleaning Kit for end-users (available on <u>www.agc-store.com</u>). When using a rubber squeegee, take care not to damage the coating with the metal handle.
- Do not try to remove impurities while the glass is dry.
- During the cleaning process, do not apply excessive pressure, as this could causes scratches or stains on the glass surface. Glass cleaner should be applied evenly across the entire glass surface and then wiped off evenly. The more uniformly the surface has been wetted with cleaner and then wiped off, the lower the risk of creating stains. Never dry wipe using excessive pressure. If stains still arise, repeat this sequence.
- Once cleaned, the glass should be rinsed with clean water and wiped with a squeegee.
- When removing oily or greasy streaks (e.g. fingerprints), the cleaning agents should always be applied to the entire glass surface.

#### **5. FREQUENCY**

How often the glass needs to be cleaned depends on the surrounding environmental conditions and pollution levels. Glass gets dirtier in dusty and humid areas (e.g. kitchens, bathrooms, toilets, hair salons, gyms, operation rooms, etc.) and in public areas.

## 6. SPECIAL CLEANING PROCEDURE

When normal cleaning is not enough, the special cleaning procedure can be followed 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 painted or silvered back (if any) of the decorative glazing.
- Remove other residue by lightly polishing the surface with a suspension of cerium oxide in water (between 100 and 200 grams per litre).
- Where circumstances allow, very dirty surfaces (including acid-etched glass) can be washed with a high-pressure cleaning device (i.e. Kärcher) with a water temperature of at least 30°C or a steam cleaner (hot water vapour).
- Rinse thoroughly and then follow the normal cleaning procedure explained above.

## 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, steel wool or similar items.			
N - to have			Damage to an etched surface caused by silicone or similar materials is usually irreversible. To clean off such materials, you can use the silicone remover from the FIX-IN Cleaning Kit for installers, or, if it is not available, you can try with a soft (non-abrasive) white eraser. School erasers are also suitable for removing dirt and smudges caused by materials such as rubber, crayon or lipstick.			
Matelux Matelux Anti-slip Matelac Matelac T			<ul> <li>For etched surfaces, we recommend glass cleaning agents containing alcohol, such as:</li> <li>AGC FIX-IN Glass Cleaner</li> <li><i>Clin</i> by Henkel – window cleaner spray with alcohol;</li> </ul>			
Lacomat			<ul> <li>Vitro by Amstutz Produkte AG – industrial cleaner for windows and mirrors (2-butoxyethanol).</li> </ul>			
	Etched surfaces should always be <b>wet cleaned over the entire surface</b> . Never perform spot cleaning.					
	Best practice for typical dust on etched surface:					
	Paint stains: 2-butoxyethanol base (Vitro)					
	Plasterboard stains: high-pressure water					
	• D	oust and	smears: high-pressure water			
			Any scratching will penetrate the surface of the coating and cannot be repaired.			
Stopsol Supersilver			Any excessive mechanical treatment might remove the coating in localised			
ipachrome design			areas.			
			Avoid all contact with metal objects.			
			Avoid any chemicals that will attack the surface and damage it irreparably.			
Mirox MNGE			When cleaning the mirror, the edges must always be dried quickly and thoroughly.			
Mirox 4Green+ Matelac Silver			Never use ammonia-based products or abrasive products (such as anti- limescale products) to clean Mirox MNGE or Mirox 4Green+.			
			Never use detergents with pH<2 or pH>12 since, if they come into contact with the back of the mirror, they will cause corrosion.			
Lacobel Lacobel T			The special cleaning procedure can <b>only be used on the glass side</b> of decorative glass products.			
Stratobel			When cleaning laminated decorative glass, the edges must always be dried quickly and thoroughly.			

# 8. BEST PRACTICES FOR CLEANING GLASS IN HOUSEHOLD APPLICATIONS

		D GLASS (MATEL			
Source of stain	AFTER 6H		AFTER 24H		Best practice
	Water	<ol> <li>FIX-IN Glass Cleaner</li> <li>Water</li> </ol>	Water	<ol> <li>FIX-IN Glass Cleaner</li> <li>Water</li> </ol>	
Beer	$\odot$	$\odot$	$\odot$	$\odot$	Water
Black tea	<b></b>	$\odot$	$\odot$	<b></b>	Water
Coffe	<b>©</b>	<b>©</b>	$\odot$	$\odot$	Water
Cola	<b></b>	$\odot$	٢	$\odot$	Water
Juice	<b>©</b>	$\odot$	$\odot$	$\odot$	Water
Milk	٢	٢	۲		1. FIX-IN Glass Cleaner 2. Water
Mustard	٢	٢	۲	<b>e</b>	1. FIX-IN Glass Cleaner 2. Water
Oil		٢	٢	٢	1. FIX-IN Glass Cleaner 2. Water
Red wine	<b>©</b>	$\odot$	$\odot$	$\odot$	Water
Silicone and glue residuals	8	8	8	8	Silicone remover from FIX-IN Cleaning Kit for installers
Soap	٢	٢	٢	٢	1. FIX-IN Glass Cleaner 2. Water
Toothpaste	٢	٢	٢	٢	1. FIX-IN Glass Cleaner 2. Water

MIRRORS (Mirox 4Green+ and Mirox MNGE)					
Source of stain	AFTE	R 6H	AFTER	Best practice	
	Water	<ol> <li>FIX-IN Glass cleaner</li> <li>Water</li> </ol>	Water	1. FIX-IN Glass cleaner 2. Water	
Fingerprint	<b></b>	٢	<b></b>	٢	FIX-IN Glass cleaner
Soap	:	٢		٢	<ol> <li>FIX-IN Glass cleaner</li> <li>Water</li> </ol>
Toothpaste	٢	٢	٢	٢	1. FIX-IN Glass cleaner 2. Water
Silicone and glue residues	8	8	8	8	Silicone remover from FIX-IN Cleaning Kit for installers

☺ Very easy (easier than cleaning float glass)

- Easy (like cleaning float glass)
- 8 Difficult

MATERIALS TO USE FOR CLEANING	MATERIALS TO AVOID WHEN CLEANING AS THEY MAY RESULT IN SCRATCHES OR DETERIORATION OF THE GLASS/MIRROR
Sponge	Abrasive sponge (sponge made of melamine resin )
Water	Steel wool
Soft cloth	Metal squeegee
Alcohol	Strong acid
Rubber squeegee	<ul> <li>Alkali detergent</li> </ul>
Glass cleaner	<ul> <li>Abrasive detergent</li> </ul>
Neutral detergent	<ul> <li>Water-repellent detergent</li> </ul>
	Denatured alcohol

#### AGC offers two types of cleaning kits

#### **FIX-IN Cleaning Kit for installers**

- Sponge to clean the glass
- Silicone remover to remove silicone residue
- Surface cleaner to clean the glass properly with the sponge



#### FIX-IN Cleaning Kit for end-users

- Glass cleaner
- Sponge



You can buy our cleaning kits at <u>www.agc-store.com</u>

## 9. DISCLAIMER

This document gives recommendations on how to ensure the best possible cleaning and maintenance procedures for AGC decorative glass products for interior use, from the construction phase to the post-installation phase.

The information in 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* states its date of publication. The latest version of the *Cleaning and Maintenance Guide – Decorative Glazing* replaces all previous versions. Customers should be aware that the latest 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 may be consulted on <u>www.agc-yourglass.com</u> or obtained from your local AGC representative. Customers should always check whether an updated version of the *Cleaning and Maintenance Guide – Decorative Glazing* and *Maintenance Guide – Decorative Glazing* is available before using AGC glass products.

AGC's warranty on glass products will only apply if the latest version of this *Cleaning and Maintenance Guide – Decorative Glazing*, which may be updated at any 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 in question. 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 contact AGC's Technical Advisory Services (TAS) at any time 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, in accordance with its general terms and conditions of sale.