

AGG Hardcoat LowE General Cleaning & Handling Guidelines

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.

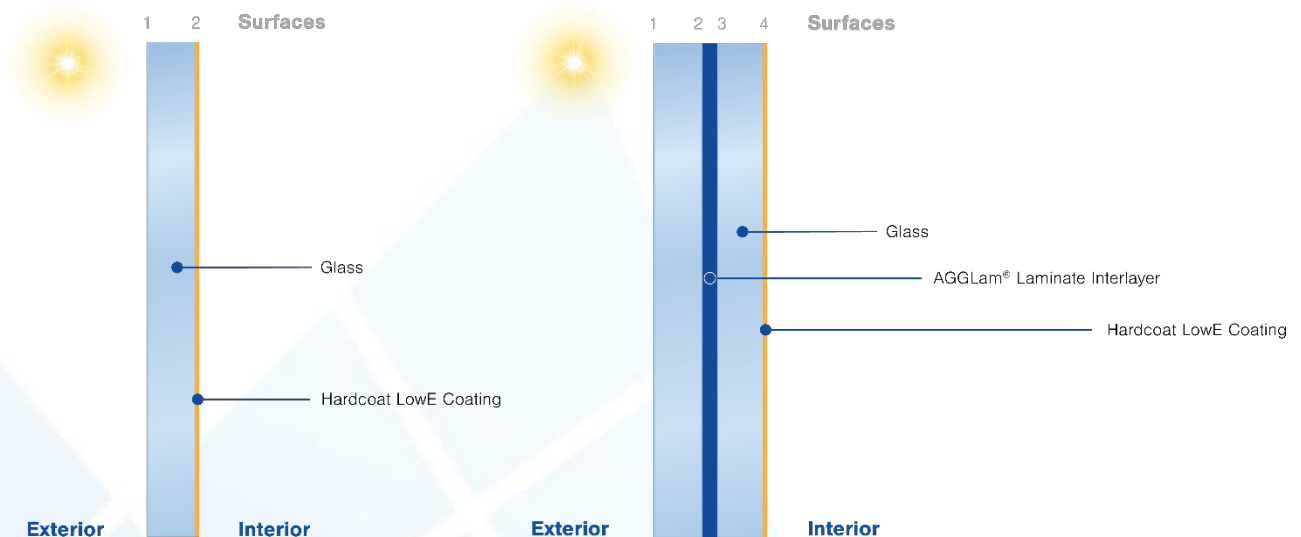
Hardcoat LowE Glass Products

Hardcoat LowE coated glass (Pyrolytic coated glass) have one surface coated with a metallic layer that gives it heightened performance in both U-Value and SHGC compared to regular clear glass. It is also this Pyrolytic coating that allows it to be used in single glazed application with the coating exposed.

For all Hardcoat LowE single glazed monolithic products that have 2 surfaces in total, the Pyrolytic LowE coating should be on surface #2 - facing inside the building and so not exposed outside to the elements.

For all Hardcoat LowE single glazed laminated products that have 4 surfaces in total, the Pyrolytic LowE coating should be on surface #4 - facing inside the building and so not exposed outside to the elements.

See cross section diagrams below:



For both applications above, this sees the coating exposed to the inside of the building where it can be touched by hand and cleaning products. Please ensure special care is taken when cleaning these glass types to ensure the coating is protected and not damaged once cleaned.

The Exterior surface of both applications above have no coating and can be cleaned like regular clear glass and clear laminated glass. See our *AGG General Cleaning & Handling Guidelines* on our website for further detail.

If using these products in an Insulglass® Insulated Glass Unit (IGU), then the coating will be protected within the air gap of the IGU and not exposed. The information below relates to single glazed Hardcoat LowE glass products with the coating exposed to the inside of the building.

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. Recommended cleaning products are Windex® Multi-Surface Cleaner (colourless liquid) available from supermarkets or a mixture of one part vinegar to ten parts water. Other commercially available vinegar-based glass cleaners have generally demonstrated an ability to provide a clean, streak-free glass surface but it is not recommended to use any ammonia based or alcohol based glass cleaners.

Procedure:

- Ensure that any jewellery, watches or anything that may scratch the coating is removed and it is best to wear clean gloves to avoid scratching the surface of the coating. 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 clean cloth saturated with the cleaning solution. Be generous with the amount of solution applied.
- Scrub the wet surface with a clean lint-free towel or cloth.
- Wipe dry with an additional dry, clean, lint-free towel or cloth.
- To prevent streaking, stop wiping when the glass is almost dry and there is a uniform film left on the glass surface that will quickly evaporate.

Spot Cleaning

For any spot cleaning of stubborn dirt or foreign materials stuck on the coating. Recommended cleaning product is Methylated Spirits available from supermarkets or hardware stores and to be used in accordance with the manufacturer's recommendations and warnings.

Procedure:

- Ensure that any jewellery, watches or anything that may scratch the coating is removed and it is best to wear clean gloves to avoid scratching the surface of the coating. Scratches that occur from foreign objects will be permanent and are not repairable.
- Apply a small portion of the Methylated Spirits to a clean, wet cloth or towel.
- Rub only onto the area that requires the spot cleaning.
- Wipe clean with an additional dry, clean, lint-free towel or cloth.
- Follow by a Routine Cleaning procedure.

Specialised Cleaning

For any cleaning requiring further specialized cleaning. Recommended cleaning product is Hydrochloric Acid available from hardware stores and to be used in accordance with the manufacturer's recommendations and warnings.

Procedure:

- Ensure that any jewellery, watches or anything that may scratch the coating is removed and it is best to wear clean gloves to avoid scratching the surface of the coating. Scratches that occur from foreign objects will be permanent and are not repairable.
- Pre-clean the coated surface with clean water and a lint-free towel or cloth.
- Carefully follow the manufacturer's use and safety instructions.
- Ensure surrounding materials are protected from Hydrochloric Acid spills, if the acid spills on frames, sill, floors and other materials or unprotected skin please follow manufacturer's safety instructions immediately.
- Apply a small portion of the Hydrochloric Acid to a clean, wet cloth or towel, or cotton bud for any small areas.
- Rub only onto the area that requires the specialised cleaning.

- After cleaned off, neutralise the area with clean water.
- Wipe clean with an additional dry, clean, lint-free towel or cloth.
- Follow by a Routine Cleaning procedure.

What Not to Do

- 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 use cleaners which contain Hydrofluoric or Phosphoric acid as they are corrosive to the glass surface.
- Abrasive cleaners, powder-based cleaners, scouring pads or other harsh materials should not be used to clean windows, glass doors or other glass products.
- 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 risk).
- 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 and suitable for glass.
- Do not use a squeegee on the coated surface.
- Do not use razor blades, steel wool, scouring bristles or any other metallic or abrasive objects on the coated surface. This can remove part of the coating that will also result in discoloured stains.

Storage and Handling

- Glass should be stored in a dry and clean environment with good circulation of cool dry air to avoid staining and marking. Storage areas should be out of direct sunlight as some glass can be susceptible to thermal breakage.
- Where glass has been received in a wet condition, it should be separated, dried and restacked with separators to allow airflow around the panels.
- Glass should always be stored vertically and at a slight angle. The edges should be supported on wood or a soft material and contact with hard materials must be avoided.
- When glass is stored and transported there should always be some kind of a protector between the glass surfaces to prevent transit damage. This should be appropriate to the product and size, and may be paper, rubber pads or plastic wrap on the glass. Bear in mind, glass is fragile and will be broken if handled or stored incorrectly. Particular care should be taken to ensure the glass is properly fastened and secured to prevent damage.
- Glass should always be handled by people trained in approved practice, always taking into account good health and safety procedures.
- Glass must be protected from site contamination caused by building materials and other site practices during construction as this will assist in the cleaning of the glass at the conclusion of the construction.

Installation

When selecting an appropriate sealant, it is important to consider the properties of various sealants in order to avoid any long-term problems. It is important not to use any acetic sealants on laminated glass as they may attack the interlayer. It is recommended using a neutral cure sealant on laminated glass. The same applies with Insulated Glass Units (IGU), please ensure that when glazing IGU's that you are using a compatible sealant to the secondary seal of the IGU.

Disclaimer

Information provided in this document is issued as a guide only and should not be treated as a substitute for detailed technical advice. Australian Glass Group disclaims any liability for loss or damage from the use of such data. To the best of our knowledge, the information provided is correct and accurate at the time of issue.

It is the responsibility of the reader to ensure they are viewing the most up to date version of this document, which can be obtained from our website www.agg.com.au or by emailing info@agg.com.au

AGG NSW

140 Gilba Rd
Girraween, NSW
P: (02) 9896 0566
F: (02) 9896 0190

AGG VIC

81-83 Rushdale St
Knoxfield, VIC
P: (03) 9730 7400
F: (03) 9730 7488

AGG TAS

39 South Arm Rd
Rokeby, TAS
P: (03) 6247 1625
F: (03) 6247 6843

