

LACOBEL / MATELAC & IMAGIN BACK-PAINTED PROCESSING GUIDE

VERSION 5.0 - September 2025



WARNING

Please read this Processing Guide carefully before processing Lacobel, Matelac and Imagin Back-painted products.



Important Preliminary Instructions

At each stage in the production process the personnel involved must wear the personal protective equipment required for the work they are performing, such as safety gloves, safety footwear and safety glasses.

Personal protective equipment as well as auxiliary materials and equipment that might come into contact with the processed product must be tested beforehand to ensure they are compatible with the coating. AGC accepts no liability for any damage caused due to the use of non-approved materials or incorrectly used materials and/or equipment.

Additional recommendations regarding product specifications and processing are outlined and explained below. Should you have further questions or require support feel free to contact your AGC representative.

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

Please regularly check <u>www.agc-yourglass.com</u> for any updates.



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1. INTRODUCTION

The purpose of this guide is to ensure that users of Lacobel/Matelac and Imagin Back-painted glass are able to process the product correctly - cutting, edge shaping, etc. - so that it meets the end-user's requirements in full.

Lacobel/Matelac and Imagin Back-painted are decorative glass that need careful handling. If you are processing Lacobel/Matelac and Imagin Back-painted for the first time, please contact your local AGC Glass Europe agent, through whom you can obtain full guidance on technical issues.

Lacobel/Matelac and Imagin Back-painted have been designed for indoor use. Care should be taken when handling and processing the glass in order to avoid damaging the paint coating. Therefore we strongly recommend that anything coming into contact with the paint coating during the processing stage be preapproved.

For information on installation, please read the "Lacobel/Matelac & Imagin Back-painted Installation Guide" (also available on www.agc-yourglass.com).

2. PACKAGING

After production, special attention is paid to the packaging in order to preserve product quality.

Lacobel/Matelac and Imagin Back-painted are available in standard sizes (for more details, consult our "Product Catalogue" on www.agc-yourglass.com).

The following systems ensure that the glass is correctly packaged:

- The painted sheets of glass are standard packed with the paint facing the stillage.
- The packs may be turned around upon request so that the paint is facing outwards.
- The sheets of glass are separated by a separating powder for thicknesses ≤ 8 mm or by a paper sheet for thicknesses > 8 mm.
- The exact contents are indicated on the label affixed to the edge of the pack or packaging.

3. UNLOADING

The glass packs should be inspected immediately upon arrival. AGC will not accept any claims regarding defects occurring after delivery, or during handling, processing and installation of the final product in the building if the Lacobel/Matelac and Imagin Back-painted processing recommendations have not been respected.

Conditions for unloading Lacobel/Matelac and Imagin Back-painted:

- The rack must be positioned on perfectly level ground.
- The appropriate unloading device or grab must be used.
- The grab must be perfectly centred.
- Care must be taken to avoid damaging the protective packaging during handling.
- The glass should be stored on appropriate racks.



General comments:

- Grabs, slings, lifting beams and other hoisting equipment must comply with prevailing regulations and be approved by the relevant authorities.
- Personnel safety must be ensured at all times. Keep all unnecessary personnel out of the handling area. Wear appropriate personal protective gear.
- Personnel must have received the required training.

4. STORAGE PRIOR TO HANDLING

Storing packs correctly reduces the risk of chemical or mechanical damage to the glazings and will therefore make them easier to install.

As a general rule, the glass should be stored in a dry, well ventilated place to avoid major fluctuations in temperature and humidity that may cause condensation to form on the glass. Such variations generally occur near loading and unloading areas. No water must be allowed to come into contact with the sheets of glass and they should never be stored outdoors. No direct UV radiation must be allowed to protect the coating against fading.

The glass should always be stored away from sources of heat and other corrosive materials or agents such as organic solvent vapours, chemicals, acids or fuel oil, etc.

Factory racks are used for packaging during transport and are not designed to be used for storage. Consequently, the packs must be stored vertically on racks that have a soft base, such as wooden slats.

Separate the packs with spacers ensuring that all packs of the same size are stored together.

5. STORAGE AFTER OPENING / HANDLING THE PACKS

The same conditions for storing the packs prior to opening should also be applied once the packs have been opened. However, it is important to bear in mind a number of additional points:

- Care should be taken to ensure that the ambient air is not polluted by any corrosive elements such
 as chlorine or sulphur. Sources of such elements include machinery fitted with thermal engines,
 battery-charging points, road salt on the ground and so forth.
- The sheets must be moved using a suction-pad lifting beam or an automatic unstacking machine.
- If the glass is handled by placing suction pads on the paint, the suction pads must be kept clean.

5.1. Removing wooden and metal packaging

a) Wooden packaging: endcap

- Set the endcap on a support inclined at a slight angle (5°).
- Cut the vertical strapping.
- Remove the upper cover and then the two side covers.
- Remove the plastic protecting the glass.

b) Metal packaging: L frame

- Ensure that the pack rests on the uprights, not on the posts.
- Open the posts.
- Remove the posts.



5.2. Handling PLFs and DLFs

- PLFs must be lifted with a suction pad lifting beam or with an automatic unstacking machine.
- Labels and/or tape on the edge of the pack must be removed before handling PLFs.
- The lifting beam must be properly centred.
- The PLF must first be lifted slightly, and then moved away from the others.
- Care must be taken to prevent scratches, especially when handling coated glass, by ensuring that the edge of one PLF does not rub against the surface of another.

General comments:

- Any direct contact with hard materials must be avoided.
- Suction pad lifting beams and other hoisting equipment must comply with prevailing regulations and be approved by the relevant authorities.
- Personnel must check that the suction pads are adhering correctly before any further manipulation.
- Ensure the safety of personnel at all times. Keep all unnecessary personnel out of the handling area. Wear appropriate personal protective gear.
- Personnel must have received the required training.

6. QUALITY CONTROL

Lacobel/Matelac and Imagin Back-painted are manufactured in factories that are ISO 9001 certified (certificate available upon request). There is not yet a published EN standard for painted glass. Lacobel/Matelac and Imagin Back-painted packs must be inspected immediately upon arrival.

7. CUTTING

The following specific precautions must be taken when cutting:

- The cutting and transfer tables must be covered with felt and cleaned frequently to avoid scratches
 caused by small glass splinters that could damage protective paints and varnishes.
- The glass should be cut with the painted side face down on the cutting table. Exception: In the case of Imagin Back-Painted patterned glass, the glass should be cut with the painted side face up on the cutting table.
- Reduce the pressure of the cutting tool to avoid splinters.
- Use minimal quantities of neutral cutting oils (*).

(*) Recommended cutting oil:

Product description:

Acecut 5503 (ACW) or Dionol GT641 (MKU Chemie)



Suppliers:

Aachener Chemische Werke (ACW) Adenauerstraße 20 Europark C3 D-52146 Würselen

Germany

Tel.: +49 / 2405 44970 Fax: +49 / 2405 449730 E-mail: acw@chemetall.com

MKU Chemie GMBH Rudolf Dieselstrasse, 79 D-63322 Rödermark-Urberach Germany

Tel.: +49 / 6074 87 520 Fax: +49 / 6074 87 5238

E-mail: Verkauf@mkuchemie.de

- Sheets of glass cut to size must be stored on racks.
- Care must be taken to insert clean and dry paper or cardboard spacers in order to avoid scratches.
- AGC advises using the cutting wheels mentioned in the table below to successfully cut the glass with SAFE+ safety backing film through the film side.
- AGC advises using the cutting wheels mentioned in the table below to successfully cut Imagin Back-Painted glass.

Please consult the following website to find the nearest office to you:

http://www.bohle-group.com/shop/ or www.agc-store.com

- Correct cutting settings can differ from one cutting installation to another and can be tested by cutting test strips 100mm wide and at least 1m long. It should be possible to break the cut strips by hand.
- The below-mentioned cutting wheels can also be used to cut non-painted glass without a SAFE+ film.
- AGC provides this information for advisory purposes. The user/customer is solely responsible for using this device.

Cutting wheel	Angle (°)	Thickness (mm)		
B0 03A100M	100	3-4	0	
B0 03A110M	110	4-5	700°	
B0 03A115M	115	5-6		
Cutting wheel including	utting wheel including plastic holder			
B0 416A100M	100	3-4		
B0 416A110M	110	4-5		
B0 416A115M	115	5-6		



8. EDGE PROCESSING & DRILLING

Lacobel/Matelac and Imagin Back-Painted can be shaped in any way. Below is a partial list of the different kinds of shaping options.

Edge-processing	YES
Drilling	YES
Notching	YES

- Processing quality depends on clean cutting.
- Adjust the speed of the edge processing machine according to the number of grinding wheels fitted to it and the thickness of the glass.
- If grinding a flat joint with edges, avoid edges with an angle greater than 145°.
- The quality of grinding on the painted side of Lacobel/Matelac and Imagin Back-Painted must be smooth and free of glass shards.
- Use a non-abrasive coolant liquid (neutral pH) to prevent damage being caused to the protective coatings.
- The glass must be kept moist for the entire process to prevent it from drying naturally before washing.
- The glass sheets shall never be stacked wet on a stillage, between edge-processing and washing.
- Clean the cooling water circuit regularly to remove glass particles and plastic particles of SAFE+ safety backing film.
- Wash processed products immediately, preferably with de-ionized water, and dry carefully (within 30 minutes after edge processing), especially around the edges.
- Use clean and dry spacers when stacking processed products.

9. WASHING

This stage involves washing, rinsing and drying the glass.

The glass must be washed in clean, deionised water with a pH of 7 (± 1), water temperature < 40°C.

No hard particles (such as calcium or others) or acidic/detergent agents should be present in the water used for washing and rinsing as they may damage the paint.

<u>The glass should be completely dry when it leaves the machine.</u> Water droplets must be wiped off with a piece of tissue. We recommend inspecting the glass after washing.

After washing and for intermediate storage, cork discs with (self-adhesive) foam can be placed on the glass side, around the edges of each glazing to prevent contact between the glass and the paint. Spacers they must be clean and dry.



10. LAMINATING

Lacobel/Matelac and Imagin Back-Painted are painted decorative glass products for use in interior applications only.

They cannot be laminated or used in insulated glazing units, even on the inner side of the glazing unit. The plastifiers in the PVB would have a negative influence on the adherence on the paint coating.

However, Lacobel/Matelac ,SAFE+ is the perfect solution for your safety needs. Lacobel/Matelac, safety backed according to "EN12600 type B" have a similar breakage pattern to laminated glass (pieces of glass remain attached to plastic film without separating).

Note: Imagin Back-Painted is not available in SAFE+ version at AGC, if needed, the foil must be applied by an independent processor. The SAFE+ film can be bought on www.agc-store.com.

11. HEAT TREATMENT

Lacobel/Matelac and Imagin Back-Painted are annealed decorative glass products covered with an organic paint. Therefore they cannot be heat strengthened nor thermally toughened. If heat-treated glass such as toughened or heat strengthened is required, AGC recommends its Lacobel T and Matelac T products.

12. SANDBLASTING

Lacobel and Imagin Back-Painted may be partially sandblasted on the non-painted (glass) side. Matelac is by definition an acid-etched glass.

13. ACID ETCHING

Lacobel and Imagin Back-Painted may be (partially) acid etched on the non-painted (glass) side. Matelac is by definition an acid-etched glass and can be an alternative option.

14. BENDING

Lacobel/Matelac (SAFE+) and Imagin Back-Painted cannot be bent. Lacobel/Matelac, Imagin Back-Painted and Lacobel/Matelac SAFE+ cannot resist an absolute temperature > 80°C but can resist a relative temperature difference of 30°C within one sheet. If bending is needed, AGC recommends to use its other ranges: Lacobel T and Matelac T.

15. SCREEN PRINTING AND ENAMELLING

Lacobel/Matelac (SAFE+) and Imagin Back-Painted cannot be screen printed or enamelled, with the exception of so-called "cold" screenprinting. Lacobel/Matelac, Imagin Back-Painted and Lacobel/Matelac SAFE+ cannot resist to an absolute temperature > 80°C but can resist a relative temperature difference of 30°C within one sheet.



16. INSULATED GLAZING

Lacobel and Matelac and Imagin Back-Painted are painted decorative glass products for use in interior applications only.

In case of an internal partition, a DGU made of two panes of Lacobel, Matelac or Imagin Back-Painted, can be used.

Both painted surfaces will face into the cavity. The temperature and relative humidity inside the building must not exceed, respectively, 30°C and 70%.

In case of doubt about the inner climatic conditions, the paint of both glass panes will be edge-deleted, in order to avoid any contact with the sealing agents. Compatible silicone sealant must be used.

Other systems of internal partition may also be used.

In all cases, this type of application should be checked according to the applicable local building regulations.

IGU applications in a façade or window is strictly prohibited in any case.

17. PACKING THE PROCESSED PRODUCT

- Place the sheets vertically on or in the packing material, taking care to avoid scratches caused by stacking (see storage instructions).
- Separate the sheets with
 - paper or cardboard spacers
 - cork discs with (self-adhesive) foam, placed on the glass side, around the edges of each glazing to prevent contact between the glass and the paint, or
 - soft spacers, e.g. medium particle size polyolefin based interleavant powder Whatever the spacers used, they must be clean and dry.
- When shrink-wrapping, perforated plastic may be used if the glass is to be stored in a dry area for a normal length of time.

18. CLEANING

For detailed cleaning instructions, please consult the "Cleaning and Maintenance Guide – Decorative Glazing" in the Lacobel, Matelac or Imagin Back-Painted section on www.agc-yourglass.com.

19. TOUCH-UP PAINT

Small scratches and damages on the painted side of the glass due to handling, processing or installation can be repaired using AGC's FIX-IN TU Touch-up paint for standard colours, available at www.agc-store.com.



20. CONFORMITY AND WARRANTY, DECLARATION OF PERFORMANCE, CE MARKING AND DISCLAIMER

- Processor's Responsibility: The processor is solely responsible for ensuring the final product complies with this Processing Guide, as well as all local, national, and international standards and regulations. This includes creating the declaration of performance and applying the CE marking (or equivalent) for the final product.
- Warranty Conditions: Any AGC warranty is conditional upon on the processor conducting thorough inspections of the glass before, during, and after each processing stage. If the processor fails to follow this guide, or industry best practices, the relevant professional standards, and established procedures, all AGC warranties become void. The processor holds the ultimate responsibility for the final product's quality and fitness for purpose.
- Document Validity: This guide reflects knowledge at the time of publication and can be updated by AGC at any time without notice. It is the processor's explicit duty to use the most current version of the guide, which is available on the AGC website and supersedes all previous versions.
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