



Your Dreams, Our Challenge

# LACOBEL<sup>®</sup>T MATELAC<sup>™</sup>T

## INSTALLATION GUIDE FOR INTERIOR APPLICATION – WALL CLADDING

VERSION 1.2 – JUNE 2019

This version of the guide replaces and cancels all previous versions. Please check [www.agcglass.com](http://www.agcglass.com) regularly for any updates.

Developed by AGC Glass North America for the North American market

# WARNING

Carefully read this manual before cutting and installing Lacobel T & Matelac T products.

## Important Preliminary Instructions

### Lacobel T and Matelac T products should be processed by an AGC Qualified Fabricator of Lacobel T and Matelac T.

**Product** – Lacobel T and Matelac T **MUST BE** heat treated (thermally tempered according to ANSI Z97.1 or heat strengthened according to ASTM C1048) before installation.

**Product** – Lacobel T and Matelac T are products intended for interior and exterior applications. They are not designed for applications where the glass is back-lit. Please contact your local AGC representative for an alternative product for such applications.

**Product** – All Lacobel T and Matelac T colors can be used in humid environments (kitchens, bathrooms, etc.) but should not come in contact with water for a prolonged period of time.

**Enamel quality** – The quality (correct “fusing”) of the enamel **MUST BE** checked before installation. A simple way to achieve this is to touch the enameled side with a wet finger. No wet stain may be visible from the glass side. No variation in color along the piece may be observed from the glass side.

**Enamel quality** – Ensure that the paint on the rear of the Lacobel T and Matelac T glass has not been scratched during the cutting and assembly process.

**Dimensioning** – The thickness of the Lacobel T and Matelac T glass must be defined on the basis of the size and shape of each panel. AGC recommends minimum 1/4" (6mm) thickness for interior wall cladding (panels > 11ft<sup>2</sup>). For exterior facade applications, the thickness of the Lacobel T and Matelac T glass depends on the loads and stresses to which it is subject. Installation should meet all recognized glass standards and specifications as well as compliance to building codes.

**Substrate preparation** – Both glass and support have to be clean and dry. Do not install glass onto supports with porous surfaces without a primer pre-treatment. For adhering without primer, please contact your adhesives supplier. Before interior installation, AGC suggests painting the wall in the same color as the glass on the glass junction areas to avoid color differences that might be seen through the transparent joints.

**Installation** – For interior applications, always use adhesives recommended by AGC and follow exactly the instructions supplied by the adhesive manufacturer (particularly regarding the quantities of adhesive to be used per ft<sup>2</sup>). The use of any other adhesive not validated by AGC is the sole responsibility of the user/customer.

**Installation** – Lacobel T and Matelac T Crisp White are not fully opaque. Mechanical bonding methods are recommended. AGC recommends painting the complete wall substrate in a uniform white color.

**Safety** – The use of safety gloves and appropriate personal protective equipment is strongly recommended during all operations, handling and setting of the glass.

# LACOBEL<sup>®</sup> T & MATELAC<sup>™</sup> T

## INSTALLATION GUIDE FOR INTERIOR APPLICATION

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## I. PRODUCT: LACOBEL T AND MATELAC T

This guide sets out AGC recommended installation procedures for Lacobel T and Matelac T glass. Lacobel T and Matelac T are two opaque float glass ranges that are meant to be tempered. Their opaque quality is obtained by applying high-quality temperable paint to the rear of the glass. The difference between the two lies in their appearance: Lacobel T is reflective (temperable paint + float) while Matelac T has a satin matte finish (temperable paint + acid-etched float).

Correct installation is critical in ensuring the **correct appearance of the glass** - by preventing shadows and color variations caused by the surface to which the glass has been installed. Before it is used in any application or installation Lacobel T and Matelac T **must be heat treated** (either heat strengthened according to ASTM C1048 or thermally tempered according to ANSI Z97.1). See recommendations in the Lacobel T and Matelac T fabricating guide, available on [www.agcglass.com](http://www.agcglass.com).

Thermally tempered glass can be classified as safety glass according to ANSI Z97.1.

Lacobel T and Matelac T are products intended for **interior and exterior** applications. They are not designed for applications where the glass is back-lit. Please contact your local AGC representative for an alternative product for such applications.

Due to the **roller-wave effect** created by the heat treatment process, cutting should be done in a way that roller-waves on the final installed Lacobel T and Matelac T panes are all aligned in the same, preferably horizontal direction to **avoid visual distortion**.

The product is light- and UV-resistant. The Lacobel T and Matelac T colors are fixed during the heat treatment process.

The thickness of the float glass sheet also has a slight impact on the color, possibly resulting in color variations. Consequently, using different thicknesses of glass next to each other should be avoided.

*The content of this guide reflects our knowledge and experience at the time of publication. Customers and glass installers can always contact AGC's Technical Services for further assistance if required. The glass installer is entirely responsible for the final application, including the installation of the glass and the compatibility between the different materials used.*

## II. INTERIOR INSTALLATION GUIDE – WALL CLADDING

**If you are looking for a recommendation in the case of exterior use (facade application), please consult the Lacobel T and Matelac T Exterior Installation Guide.**

### 1. Glass dimensioning

The thickness of the Lacobel T and Matelac T glass must be defined on the basis of the size and shape of each panel, the substrate and related requirements. AGC recommends minimum 6mm thickness for interior wall cladding (panels > 11 ft<sup>2</sup>). For very large panels, thicker glass may be required.



## 2. Preparing the walls (or other support surface)

- Before installing Lacobel T or Matelac T as a wall cladding, AGC recommends checking the state of the support surface to facilitate the installation and to avoid any eventual deterioration of the glass paint
- Smooth out any uneven wall or background surfaces. A smooth surface will ensure optimum adherence of the glass
- Ensure that the glass paint is well dried and not scratched or damaged
- Apply the glass to a clean, dry surface: do not install glass onto walls or any other surfaces that are not completely dry
- Pre-treat porous surfaces with a primer

## 3. Humid environments

All Lacobel T and Matelac T colors can be used in humid environments (kitchens, bathrooms, etc.) but cannot come in direct contact with water for a prolonged period of time.

The glass must be installed in a way which prevents water from penetrating behind it. Ensure that the humid area is properly ventilated to prevent water accumulation (thus leading to permanent stagnant water) on the glass for a prolonged period of time.

## 4. Installing glass onto the support

There are two ways of fitting Lacobel T or Matelac T glass onto interior walls (or other support surface):

- The **bonding method**, using adhesives
- The **mechanical method**, using screws, metal clips or fixing the glass directly into a frame

### Special note for backsplashes

Non-tempered glass can break if there is a temperature difference of 86°F (30 °C) or more on the same sheet of glass. For instance, a hot teapot that touches the glass could cause it to break. After heat treatment, Lacobel T and Matelac T can resist up to 392°F (200°C) temperature difference within the sheet.

## 5. Bonding method installation

**If using the bonding method, you should use the adhesive best-suited to the level of safety required due to the size of the glass.**

Lacobel T and Matelac T, once tempered are a true enameled glass. For the appropriate adhesive it is recommended to refer to the instructions and warranties supplied by the adhesive manufacturer.



## 5.1 Silicone

Silicone can be used with both Lacobel T and Matelac T. Please contact our AGC Technical Services Team for more details.

AGC recommends the following adhesives for interior installation:

Supplier	Adhesive	Cleaner	Primer
Dow® Chemical	Dowsil™ 791	Dowsil™ R40 Cleaner	Not Required
Dow® Chemical	Dowsil™ 795	Dowsil™ R40 Cleaner	Not Required
Dow® Chemical	Dowsil™ 995	Dowsil™ R40 Cleaner	Dowsil™ C OS Primer Dowsil™ 1200 OS Primer
Liquid Nails® (PPG Chemical)	Fuze*It LN2000	Alcohol or Water Based Cleaner	Not Required

For structural glazing applications, Dow adhesion testing is required. This is standard procedure for anyone who is doing structural glazing.

### Recommendations for use

- Always refer to the adhesive manufacturer's instructions about compatibility with the substrate.
- Before starting, read the recommendations for use supplied by the silicone manufacturer (particularly regarding the quantities of silicone to be use per ft²).
- AGC recommends painting the entire wall in **a uniform white color** to ensure a uniform glass appearance after installation.
- When mounting Lacobel T or Matelac T, always apply double-sided tape and silicone in vertical strips while ensuring that air can circulate between the back of the painted glass and the substrate.
- For Lacobel T and Matelac T Crisp White, AGC recommends mechanical bonding method only.
- Care should be taken with the use of silicone on Matelac T glass as stains made on the matte surface cannot be properly removed afterwards.

## 5.2 Joints

Sealing the joints prevents water from penetrating to the rear of the glass and is absolutely vital in damp environments.

Joints should be 1/8" thick. For large glass panels, the recommended brands are the same as the silicones recommended for bonding.

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Liquid Nails is a registered trademark of the PPG Group of Companies.



## 6. Mechanical method installation

If using a **frame** to install your Lacobel T or Matelac T glass, you should:

- Use setting blocks and spacers to prevent contact with the frame
- Avoid contact between the Lacobel T or Matelac T and hard and/or brittle elements such as metals and porcelain

### Using metal clips and/or screws

If using **metal clips and/or screws** to fit your glass, you should:

- Insert a spacer between the clip and the glass
- Avoid contact between the Lacobel T or Matelac T and hard and/or brittle elements such as metals and porcelain

## III. Disclaimer

This document gives recommendations on how to maximize quality installation of the product. AGC Glass North America provides the information in this document for advisory purposes only. The customer/user is solely responsible for using this guide.

The content of this document reflects our knowledge and experience at the time of publication. Every version of the Installation Guide bears a reference to its publication date. The newest version of the Installation Guide 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 of the Installation Guide and AGC'S Limited Warranty terms and conditions can be located at [www.agcglass.com](http://www.agcglass.com) or obtained from your local AGC representative. Customers should always check whether an updated version of the Installation Guide is available before using AGC glass products.

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Customers and glass installers should contact AGC'S Technical Services if further assistance is required. The glass installer is entirely responsible for the final application, including the installation of the glass and the compatibility between the different materials used. The sale of AGC glass products in North America is governed by the then-current version of AGC'S General Terms and Conditions & Limited Warranty which can be found at [www.agcglass.com](http://www.agcglass.com).

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