

The logo for AGC, consisting of the letters 'AGC' in a bold, blue, sans-serif font. A small red square is positioned above the letter 'C'.

PLANIBEL EASY CLEAR - EASY BLUE INSTALLATION GUIDE

VERSION 1.0 – DECEMBER 2017

Your Dreams, Our Challenge

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

Important Preliminary Instructions

Read the following instructions carefully before installing Planibel Easy Clear and Easy Blue products.

1. **Product** - Planibel Easy Clear and Easy Blue are products intended for exterior applications. Its coated side must always face the area exposed to sun and water.
2. **Product** - Planibel Easy Clear and Easy Blue require a short period of exposure to daylight to be fully effective.
3. **Product** - Advise customers that the self-cleaning property is not activated until the glass has been exposed to UV light from the sun for approximately one week.
4. **Dimensioning** - The thickness of the Planibel Easy Clear and Easy Blue glass must be defined on the basis of the size and shape of each panel. For exterior facade applications, the thickness of the Planibel Easy Clear and Easy Blue glass depends on the loads and stresses to which it is subject. National standards and regulations and Eurocode essential requirements should be respected.
5. **Adhesives** - For facades, always use adhesive products recommended by AGC and follow exactly the instructions provided by the adhesive manufacturer (particularly regarding the quantities of adhesive to be used per m²). The correct use of adhesives is the sole responsibility of the user/customer.
6. **Safety** - The use of safety gloves and appropriate personal protective equipment is strongly recommended during all operations, handling and setting of the glass.
7. **Further information** - Please visit www.agc-yourglass.com - Planibel Easy Clear and Easy Blue brands description - to download the Installation Guide (in the language of your choice) or contact AGC's Technical Advisory Services (TAS tas@eu.agc.com).

CONTENTS

0. PRODUCT: PLANIBEL EASY CLEAR AND EASY BLUE.....	4
I. INSTALLATION.....	4
1. Introduction	4
2. Basic principles	4
3. Thickness of Planibel Easy Clear and Easy Blue	5
4. Insulating glazing recommendation	5
II. CLEANING AND MAINTENANCE – facade glazing	7
III. DISCLAIMER	7

0. PRODUCT: PLANIBEL EASY CLEAR AND EASY BLUE

This guide sets out AGC's recommended installation procedures for **Planibel Easy Clear and Easy Blue**.

Planibel Easy Clear and Easy Blue are products intended for exterior applications. The coated side must always face the area exposed to sun and water.

It is a pyrolytic coating deposited by CVD (chemical vapour deposition). The coating is deposited on the 'air side' during the (online) float glass production process, and therefore delivers very good mechanical and chemical durability.

Product availability

Planibel Easy Clear and Easy Blue are available on Planibel Clearlite 4mm and 6mm and on Planibel Dark Blue 4 mm and 6mm.

The thickness of the float glass sheet also has a slight impact on the colour, which may in turn result in colour variations. Consequently, using different thicknesses of glass next to each other should be avoided.

I. INSTALLATION

1. Introduction

To make it possible to identify the coated surface, a hand-held coating detector can be used to identify the coated side. Or it's possible to use a **A blacklight** (or often **black light**), also referred to as a **UV-A light**, **Wood's lamp**, or simply **ultraviolet light**, is a [lamp](#) that emits long-wave (**UV-A**) [ultraviolet light](#) and not much [visible light](#).^{[1][2][3][4]} to identify the tin face. The coating will be on the other side.

When the glass is located in a position where the amount of material deposited on the surface overwhelms the self-cleaning properties of the glass, or the glass is not rinsed clean by rain, then manual cleaning or hosing may be required at more frequent intervals.

2. Basic principles

Glass installers must:

- ensure that the products used for setting blocks and tightening the assembly are compatible with the glazing and with each other;
- install the glazing in accordance with prevailing regulations, standards and codes of good practice, as well as with any specific instructions issued by AGC;
- avoid any factor that is likely to damage the glazing through stress, scratches or corrosion caused by use of unsuitable products during assembly or maintenance.

Architects and project engineers must ensure that:

- the correct dimensions are used for glazing in accordance with maximum manufacturing sizes and weight dimensions;

- the loads and stresses to which the glazing is subjected are in accordance with the performance required;
- A thermal stress calculation shall be done, in order to determine if the Planibel Easy clear or Blue has to be tempered. In this case, AGC recommends to perform a HST treatment.
- the national standards and regulations and Eurocode essential requirements on mechanical resistance and stability, safety in case of fire, hygiene, health and environment, safety in use, protection against noise – acoustic insulation, energy economy and heat retention, etc. are respected;
- adjacent construction components allow for low-cost maintenance, repair and, if necessary, replacement of the glazing and joints.

3. Thickness of Planibel Easy Clear and Easy Blue

The thickness of the Planibel Easy Clear and Easy Blue glazing used depends on the loads and stresses to which it is subject:

- facade glazing (i.e. inclined at a maximum of angle of 15° from the vertical): wind
- roof glazing: wind, snow, maintenance loads and proper weight.

To determine loads, the principal will refer to standards, regulations and good practices applicable in the construction sector and define the specific factors that need to be considered (e.g. height and shape of the building or the location of the construction site).

These criteria are used to establish the thickness of the glazing required.

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

4. Insulating glazing recommendation

Planibel Easy Clear and Easy Blue can be used in many exterior applications, such as windows, facades, conservatories and sloping glass roofs. It is especially useful for inaccessible parts of buildings where organic dirt normally collects.

A gasket glazing system or a system that uses non-setting, oil-free glazing compounds should be used. The gasket should be of high quality and free of any form of silicone oil lubrication. The installed glass should be clean and dry.

The use of silicone oil-containing lubricants on gaskets must not be used. However, the Planibel Easy Clear and Easy Blue coating can be expected to break down some oils and lubricants over time.

Silicone sealants can exude oil or plasticizers containing silicones. These materials are not easy to remove from the glass and from Planibel Easy coating. If, by mistake, any silicone spots are in contact with the coating, during the manufacturing process or during installation, it has to be removed immediately, when it is still wet, by using the products recommended by the manufacturer of the glue. AGC recommends Silicone remover made by Soudal. This product is available on our site: <https://www.agc-store.com>.

When glazing into frames do not use glazing tapes that contain oil. Putty is compatible, but it is not an appropriate glazing material for IGUs or laminates.

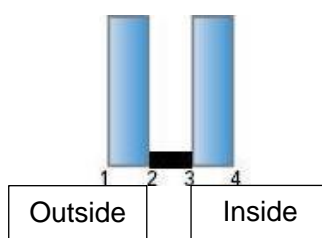
When Planibel Easy Clear and Easy Blue are glazed into a building, care must be taken during any subsequent construction. Protect the coating from site contamination such as cement, welding, rust deposits, plaster products and adhesives. Care should also be taken to prevent alkaline leach-out from concrete, etc.

Glazing with Planibel Easy under overhangs or in areas where daylight or rain cannot reach it may promote the build-up of dust on the outer pane. If daylight can reach the glass but rainfall cannot, then the lack of rainfall should be compensated by manual hose pipe water. A gentle action is all that is required to wet the glass. Pressure washers should not be used.

National or local regulations on the use of IGU as spandrels might apply. The glass installer is solely responsible for:

- communicating these regulations to AGC when ordering a glass product.
- asking for a technical approval from AGC's Technical Advisory Services (AGC TAS: tas@eu.agc.com)
An assessment on the maximum temperatures reached by each constituent material of the insulating glazing is needed. The values obtained must not exceed the maximum values stipulated in the respective technical data sheets provided by the manufacturers of the various constituent materials.
- complying with any existing local standards or rules (i.e. in France, IGU is not allowed in spandrels).

For general recommendations on correct setting of glass, please refer to AGC's Technical brochure *Glazing Instructions – Traditional Setting* at www.agc-yourglass.com.



Planibel Easy Clear and Easy Blue can be assembled in insulating glazing units (IGUs) with the following restrictions on the position of the coated surface.

	Position of the coated surface in the double-glazed unit			
	1	2	3	4
Planibel Easy Clear	OK	KO	KO	KO
Planibel Easy Blue	OK	KO	KO	KO

NOTE:

- Position 1 is facing the outside of the building; position 4 is facing the inside of the building.
- For the EU, all heat-treated glass, such as Planibel Easy Clear and Easy Blue heat-treated, must be CE marked. In accordance with EU regulations, all the requirements set out in these standards (ITT, FPC, etc.) must be met by the processor.
- The external pane must be **at least 4mm thick**.

II. CLEANING AND MAINTENANCE – facade glazing

For general cleaning and maintenance instructions, AGC recommends consulting our AGC *Cleaning and Maintenance Guide – Planibel Easy Clear and Easy Blue* at www.agc-yourglass.com.

III. DISCLAIMER

This document gives recommendations on how to ensure the highest quality installation of the product. AGC Glass Europe provides the information in this document for advisory purposes only. The customer/user is solely responsible for using this advice.

The content of this Installation Guide 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 or a different language version of the Installation Guide and our warranty terms may be consulted at www.agc-yourglass.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.

AGC's warranty on glass products only applies if the latest version of this Installation Guide, 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 Installation Guide, 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 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.

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