

# POLYCARBONATE safety glazing

Safety glazing and roof glazing for operator cabins on agricultural, public works, handling and forestry machinery / Cable cars / Ski lifts / ...



**PLASTRANCE**  
SOLUTIONS PLASTIQUES

With the advantages of CLEARGARD® polycarbonate safety glazing, you will have no worries.

In construction, industry, agriculture and materials handling, operator cabins and special vehicles are routinely subjected to extremely harsh operating conditions. Glass breakage, whether accidental or due to vandalism, is a major risk factor and both endangers operators and threatens cabin safety. Plastrance produce all forms of glazing, flat or curved, for windscreens, side windows, rear windows, cabin glazing or roof glazing. Our CLEARGARD® glazing comes in two grades: standard, and protected by an anti-abrasion and anti-UV coating.



## Protection and optimum safety

Against deliberate or accidental glass breakage and the consequences thereof:

- Injuries
- Machine downtime
- Breaking and entering
- Incentives to vandalism

## Optimum qualities

**CLEARGARD® range:**

**1. CLEARGARD OPTI PLUS®, the new safety polycarbonate with optical quality ...**

- . Measured optical quality which meets European standards of Art. 9 of Reg. 43E/ECE/324.
- . An "optical" certification, unique on the French market, is delivered for each part produced by Plastrance, with full traceability of the glazing.
- . The "optical" certification is valid for both daytime and night-time vision as well as for the "secondary image" or halo effect.

**2. CLEARGARD® AA, anti-abrasion and anti-UV**

CLEARGARD® AA: a polycarbonate glazing treated with an anti-abrasion coating which is UV resistant. CLEARGARD® AA is particularly useful on all types of equipment, ranging from forklifts to forestry equipment.

**3. CLEARGARD® S, the basic product**

CLEARGARD® S: a standard polycarbonate glazing which can be UV-protected upon request.



## Tested and proven resistance

**Light stability**

When exposed to sunlight, CLEARGARD® AA shows only slight variations, less than 1% compared to glass. There is no discoloration and no visible change. The weather has no adverse effects on CLEARGARD® AA glazing. The improved coating which we have added to CLEARGARD® AA protects our safety glazing from early deterioration due to weather.

**CLEARGARD® AA coating has broad spectrum chemical resistance.**

Please contact us.

**Excellent light transmission**

Transparent grades of CLEARGARD® AA have a light transmission coefficient of 90%.

**Very light weight**

CLEARGARD® glazing, with its density of 1.2, is two times lighter than glass of equal thickness.

We use a specific transformation process to manufacture our glazing from special optical quality polycarbonates. (DIN 52301)





Thermoformed curved surface

Hard protective coating

Meets European standards (Regulations 43E/ ECE/343)

Light green polycarbonate

At the customer's request, Plastrance can obtain appropriate ECE R43 certification, mandatory European certification for the use of polycarbonate glazing, depending on the location of the glazing on the vehicle.

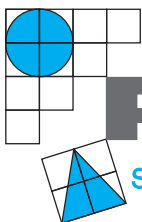
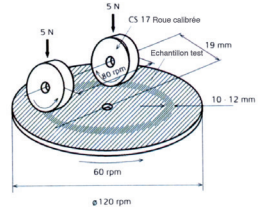
Flat or curved CLEARGARD® glazing has been tested by the most reputable testing agencies and meets our customers' needs as well as ABG, R43 and ANSI standards. Certification varies according to glazing thickness, colour, the extruder used, the polycarbonate itself and the selected anti-abrasion and anti-UV coating.

The Taber resistance-to-abrasion test (ASTM-1044 / ISO 3575) showcases Cleargard's resistance to abrasion compared with that of other materials.

Material	Abrasion % for 100 cycles	Abrasion % f or 500 cycles
Glass	2 %	2 %
CLEARGARD®	3 %	4 %
Standard PC	15 %	40 %
Acrylic	12 %	35 %
PVC	30 %	46 %



A weighted wheel (typically 500 g) is run in circles on the sample 100 times and again 500 times in order to measure the levels of abrasion.



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