

# STRATOPHONE

AGC's acoustic laminated glass

**AGC**



Your Dreams, Our Challenge

# Enhanced acoustic insulation

## STRATOPHONE

Stratophone glass is a laminated glass designed to provide enhanced acoustic insulation, effectively reducing noise pollution while ensuring a level of safety equivalent to that of Stratobel laminated glass. By improving sound insulation, this type of glass significantly contributes to the comfort of occupants, with a positive impact on their well-being and health, as well as their productivity in work and meeting spaces.

### What makes it so special?

### What are the benefits for you?

**A safety laminated glass in which the PVB interlayer is composed of three layers, one of which is extra-soft to absorb and attenuate sound more effectively**

— Stratophone glass is thin, transparent, invisible, and features safety properties. It mechanically absorbs sound waves and reduces sound transmission through the glass.

**Protection against high and low frequencies**

— The thicker the glass, the better the acoustic insulation, particularly at low frequencies (mass effect). Acoustic PVB improves acoustic insulation, especially at high frequencies (damping effect).

**Effectiveness of a product that combines various benefits**

— Stratophone combines acoustic insulation with other benefits such as safety and energy efficiency, while maintaining aesthetic appeal.

— Noise reduction can reach up to 50 to 75% compared to standard glazing.

**Different levels of sound insulation depending on the choice**

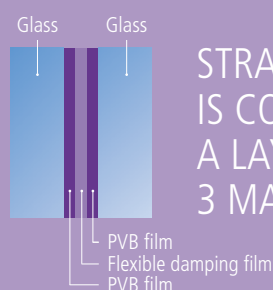
— Depending on sound insulation requirements (high or low frequency), the most suitable glass composition can be selected on the basis of  $R_w$ ,  $C$  and  $C_{tr}$  values defined in standard EN 12758 and all expressed in decibels (dB).

**Products tested and certified in laboratories**

— All our products are tested and certified in laboratories. Certificates are available through your AGC sales representative.

**Also available in Low-Carbon glass**

— Available in Low-Carbon glass, EPD certified, and accessible on the Glass Configurator.



STRATOPHONE GLASS  
IS COMPOSED OF  
A LAYER MADE OF  
3 MATERIALS

# The most common applications

## STRATOPHONE

### Building facades

Stratophone glass used in facades provides a level of acoustic insulation similar to that of a concrete wall, but with the advantage of being thinner, lighter, and allowing natural light to enter.

Material Type	Description	Thickness (mm)	Acoustic insulation $R_w$ (C ; $C_{tr}$ ) dB
Concrete block	-	200	53 (-1 ; -4) dB
Stratophone triple glazing	1010.2 AC - 14 - 8 - 14 - 88.2 AC	73	53 (-1 ; -4) dB

AC: Acoustic PVB

### Residential

Whether for relaxation, work, or overall well-being, Stratophone glass can improve acoustic insulation by 50 to 75%<sup>(1)</sup> compared with standard double glazing. It is also a safety glass.

<sup>(1)</sup> The quality of the frames must also be taken into account.

Glass Type	Composition	Thickness (mm)	Acoustic insulation $R_w$ (C ; $C_{tr}$ ) dB	Noise reduction (%)
Standard	4 - 15 - 4	23	30 (-1 ; -4) dB	50%
With Stratophone	4 - 15 - 44.2 AC	28	39 (-2 ; -5) dB	
With Stratophone	66.2 AC - 16 - 44.2 AC	37	49 (-3 ; -8) dB	75%

AC: Acoustic PVB

### Interior partitions

Stratophone glass provides better acoustic insulation than traditional dual glazing using tempered glass. It is thinner, lighter, and more cost-effective.

Glass Type	Composition	Thickness (mm)	Acoustic insulation $R_w$ (C ; $C_{tr}$ ) dB
Tempered glass	6T - air 60 - 6T	72	39 (-3 ; -4) dB
With Stratophone	66.2 AC	12	40 (-1 ; -3) dB

AC: Acoustic PVB



Partition with 2 toughened glasses



Partition with Stratophone glass



# Noise perception and glossary

## STRATOPHONE

### Attenuation in dB

- 1 dB → Almost inaudible
- 3 dB → Just audible
- 5 dB → Noticeable / obvious
- 10 dB → Noise reduced by 50%
- 20 dB → Noise reduced by 75%

According to a logarithmic scale



**R<sub>w</sub>** Refers to the average acoustic attenuation of glass.  
The higher the R<sub>w</sub> value, the better the overall sound insulation.  
This value is measured in a laboratory and represents a weighted average across the entire acoustic insulation spectrum.

**R<sub>w</sub> (C;C<sub>tr</sub>)** The values C and C<sub>tr</sub> are corrections applied to the average R<sub>w</sub> value to specifically account for low and high frequencies (common example: 4/16/4: R<sub>w</sub> (C;C<sub>tr</sub>) = 31(-1;-4) dB).

DISCOVER  
our products  
and acoustic values  
table here



Stratophone is Cradle to Cradle  
Certified® Bronze

