

## WHO WE ARE









- SECUR GLASS has been manufacturing automotive and architectural armoured glass both in Mexico and in the United States, for over 20 years.
- Our glass is used all over the world by governments, local and multinational companies, as well as private individuals.
- Our plants can satisfy your needs with the best delivery dates.
- Our armoured glass meets the most rigorous international standards, concerning both optics and ballistics.
- We use the best available technology and have a highly committed staff, striving to find the precise answer for every client.
- We manufacture both flat and curved glass, in various hues and finishes, with anti-spalling and anti-scratch treatment on the inner or outer face, for all kinds of architectural or automotive applications.
- We use state-of-the-art raw materials, provided by such renowned vendors as Dupont®, General Electric®, Bayer®, Sekisui®, Guardian®, Vitro® and Saint-Gobain®.
- Our armoured glass may include any of the following features:
  - Defroster
    - Operational antennae
    - Edge Sealer contour finish
    - Special packaging

# **AUTOMOTIVE ARMOURED GLASS**



Secur\*Glass employs state-of-the-art-technology to develop armoured glass panes for the great majority of vehicles on today's roads.

The ballistic performance of our armoured glass is well above that of other manufacturers. We possess every element to supply you with automotive armoured glass of optimum quality, with any required feature or characteristic. Secur\*Glass is committed to your satisfaction.

# ALL OUR ARMOURED GLASS FEATURES UV FILTER.

We can proudly say we have archiever the strenght of steel in transparent materials.

All our armoured glass panes for automotive use are equipped with UV filter, a feature which reduces the penetration of UV rays into the vehicle. This allows for a much cooler interior in your car. Besides, since multi-layered glass is a great acoustic isolator, the noise levels in your vehicle are substantially reduced. The exact curvature of our glass panes provide a perfect fit when installed in your armoured car. We can manufacture any type of armoured glass and meet any ballistic standard, producing both offset and non-offset edge finishings.





## ARCHITECTURAL ARMOURED GLASS



### PROTECTION OF PROPERTY

Besides frustrating entry, the use of safety-glass windows allows for greater flexibility when designing facades that do away with iron grills or roll-curtains. Windows are usually the favorite entry point of burglars and trespassers. Armoured glass acts as an efficient barrier against such incidents. Since the intruder cannot easily break the armoured glass pane, alarms will go off and entry will be avoided.

Architectural multi-layered glass can be designed to protect against physical shock, stone-throwing or firearms.

### **ACOUSTIC PROTECTION**

The excellent acoustic behaviour of armoured glass panes is due to the loss of energy of the sound waves as they travel through Glass + Glass + PU + PC.

### THERMAL PROTECTION

Through the use of different darkening hues, our armoured glass can be made to reduce incoming solar energy and therefore heat gain, which provides for aless bright and cooler environment on the inside.

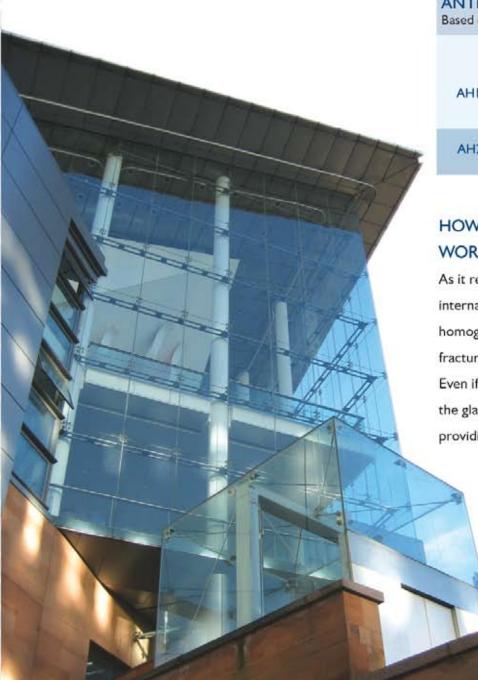
### ANTI-SANDSTORM AND ANTIHURRICANE GLASS

Hurricanes often reach velocities in excess of 120 km/h.

Buildings and structures equipped with glass designed to resist this kind of phenomenea become the safest posible haven, saving both lives and avoiding or minimising physical damage.

### WHAT IS ANTIHURRICANE GLASS?

Antihurricane glass is a composite of floated glass, polivinylbutiral, policarbonate and other materials. Its thickness may vary from 13 mm to 17 mm, depending on the characteristics desired. We produce two types of antihurricane glass: AHI and AH2, whose features and performance depend on the type of risk you may want to cover.



# ANTIHURRICANE GLASS Based on the Zafir-Simpson scale Category Wind Speed Km/hr. I I19 - 153 AHI II I54 - 177 III 179 - 209 IV 210 - 249 V over 250

# HOW DOES ANTIHURRICANE GLASS WORK?

As it receives impact and pressure on its surface, its internal compounds absorb and dissipate energy homogeneously all over its surface, thus avoiding fracture.

Even if fracture ocurrs, either on one or both faces, the glass panel will remain in place and will not yield, providing safety and protection, even after fracture.

> OUR ANTIHURRICANE GLASS DOES NOT REQUIRE ANY SPECIAL MAINTENANCE AND ITS APPEARANCE IS IDENTICAL TO REGULAR GLASS.

# BALLISTIC RESISTANCE

Ballistic Resistance Secur\*Glass.

### STANDARD

Level Secur*Glass	CEN. DIN.	N.I.J.	U.L.	N.O.M.	Thickness	Round	Weapon	
Ţ	ВІ	-	1	-	15 mm.	.357 Magnum 9 x 19 mm.	Revolver Pistol	
11	B2, B3	11	11	A	17 mm.	.357 Magnum 9 x 19 mm.	Revolver Pistol	
Ш	B4	III-A	III	В	19-21 mm.	.44 Magnum	Revolver	
IV	-	_	_	С	32 mm.	7.62 x 39 mm.	AK-47	
, V	B6	Ш	VII	D	42 mm.	7.62 x 51 mm. 5.56 x 45 mm. 5.45 x 39 mm.	.308, FAL AR-15, M-16 A2 AK-74	
VI	В7	IV	-	Е	65 mm.	7.62 x 51 mm. AP 7.62 x 63 mm. AP	.308, FAL 30-06	

Certifications:

Mexican Standard:

NOM-142-SCFI.2000

International Standards: UL Laboratories (USA); Euro Norm En 1063; D.I.N. 52290 y NIJ 1,2A, 2 y 3 (Germany); H.P. White Laboratories (for glass)

### TECNOLOGICAL ADVANTAGE

Because we have our own Research & Development Lab, we exert full control of our technology and have the ability to create new ways of making our products better and more economical. This is the basis of our flexibility and growth capacity.

#### **International Standards:**

### H.P. White Laboratories (for glass)

### H.P. WHITE LABORATORY, INC.

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January 29, 2007 [HPWLI 10179-02H1]

Secur Glass Blindajes Gutenberg No. 189 Col. Nueva Anzures Mexico, D.F. 11590 MEXICO

Attention: Francisco Rios Zertuche President

Dear Francisco Rios Zertuche:

You recently requested ballistic resistance testing of three transparent armor samples received on January 19, 2007 via Unicorn Motor Freight.

Testing was conducted in accordance with provisions of EN1063, Level BR-6 using caliber 7.62x51mm, 149-grain, M80, Ball ammunition. The test sample was rigidly mounted on an indoor range 32.8 feet from the muzzle of a test barrel to produce zero degree obliquity impacts. Redundant pairs of photoelectric lumiline screens were positioned at 23.5 feet and 26.5 feet. In conjunction with electronic chronographs, they provided projectile velocities 25.0 feet from the muzzle. Penetrations were determined by visual examination of a 0.001" thick sheet of aluminum foil positioned 20.0 inches behind and parallel to the test sample. Table I provides a summary of information on the attached Data Records.

# TABLE I – SUMMARY OF RESULTS [Interlaminados Transparent Armor]

Test S	Ba	Penetration						
Number	Thickness [in.][a]	Weight [lb.]	Caliber	Shots [b]	Velocity [fps]		Bullet	Spall
CONTRACT					Min.	Max.		Only
Glass 44mm-M80-1	1.817	57.12	7.62x51mm, M80	3	2710	2743	0	0
Glass 44mm-M80-2	1.817	57.13	7.62x51mm, M80	3	2710	2729	0	0
Glass 44mm-M80-3	1.825	57.48	7.62x51mm, M80	3	2716	2733	0	0

RESEARCH - DEVELOPMENT - ENGINEERING

Secur\*Glass was created in 1984 to provide security solutions through the use of armouring technologies for motor vehicles and buildings.

Our company operates in several countries and is growing constantly.



