

# Innovating Transparencies for the Security World







# The Company

As the **global leader** in high-performance transparent solutions, Isoclima redefines excellence with groundbreaking technologies, unmatched quality, and a steadfast commitment to **security** and **protection**. Serving industries across Land, Air, and Sea, Isoclima's solutions are crafted with precision to meet long-term customer needs. With a strong focus on **R&D** and the ability to tackle new challenges, Isoclima stands as a trusted partner and market reference for complex and customized transparent solutions.



# Our Global Presence

Isoclima's reputation as a supplier to the world's leading automotive brands—including Stellantis, Mercedes-Benz, BMW, and VW-Audi Group—demonstrates our ability to deliver tailored, high-quality solutions that balance **resistance**, **protection**, and **optical performance**. Our flexibility and customer-centric approach position us as the go-to choice in diverse markets where high standards are non-negotiable.







 2021 Mercede Benz-S 680 Guard 4Matic

# A Legacy of Innovation

Isoclima's reputation is built on a foundation of trust, precision, and innovation. Our **co-engineering processes** allow us to partner with the world's top automotive brands, including Stellantis, Mercedes-Benz, BMW, and VW-Audi Group. These collaborations highlight our ability to deliver tailored solutions that balance **resistance**, **protection**, and **optical excellence**. This adaptability and focus on customization ensure our solutions meet the most complex requirements across diverse industries.



# Security Solutions

### Tailored Protection for Every Threat

Isoclima's diversification strategy has enabled us to transfer advanced technologies across industries, including civilian and military armored vehicles, special vehicles, and racing cars. Our solutions are designed to meet the most stringent international standards while offering customization and comfort.

## Military Vehicles

The lightest and thinnest glazings globally, capable of withstanding extreme conditions. Fully compliant with NATO STANAG 4569 (Level 1–4) standards, ensuring reliable protection in international crisis zones.

### Armored Vehicles

Composite windows with integrated ballistic steel, anti-fog systems, heating, and embedded antennas. Tested and certified for compliance with standards such as UNI EN 1063 (BR1-BR7), VPAM PM VR, NIJ 0108.01, and UL752.

## Customization for Defense and Security

Our advanced solutions integrate options such as heating systems, electromagnetic shielding, and IR-reflective coatings, offering unparalleled protection while maintaining clarity and durability.





## Advanced Know-How



### Anti-IR Coating.

Selective solar protection filters ensure superior comfort and energy efficiency, reducing heat transmission while maintaining optical clarity.



#### Solar Protection Technologies.

Laminated glass integrates advanced coatings and plastic films, providing efficient UV and infrared radiation protection.



#### Chemical Strengthening.

This specialized surface treatment enhances the mechanical strength of glass, improving its resistance to impact without compromising transparency.





#### Magnetron Sputtering & CVD Coatings.

Advanced magnetron sputtering technology enables the application of ultra-thin conductive or semiconductive coatings, achieving outstanding optical and electrical performance.



#### Heating Systems.

Our heating systems integrate seamlessly into glass structures, offering invisible wire systems or electrically conductive coatings to provide de-icing and defrosting capabilities.



#### Lightweight Solutions.

To address the critical need for weight reduction in automotive, aerospace, and defense sectors, Isoclima combines glass with innovative materials such as polycarbonate and ceramics, achieving up to 40% weight savings.



#### Encapsulation.

Encapsulation technology enhances durability and lifecycle performance, significantly reducing maintenance costs and increasing product longevity.





# Innovative Products

#### — OmniGard®

Specially developed for anti-penetration and anti-theft applications in the automotive sector, OmniGard® offers robust security and reliability.

## — OmniArmor®

Designed for ballistic resistance to the highest standards, OmniArmor® delivers exceptional protection with an unmatched weight-to-strength ratio and superior optical clarity.

#### — CromaLite®

Using SPD (Suspended Particle Device) technology, CromaLite® dynamically adjusts light transmission, making it ideal for privacy and solar control across automotive, architectural, and rail applications.

#### — EmiGard®

A laminated composite panel that shields electromagnetic waves while maintaining optical transparency. EmiGard® is widely used in automotive, aviation, and defense sectors.



#### — IsoLite®

With integrated PDLC (Polymer Dispersed Liquid Crystal) film, IsoLite® transforms from transparent to opaque instantaneously, offering unmatched privacy and light control for interiors and high-security applications.

#### — Secur<sup>®</sup>

A high-tech bullet-resistant panel designed for civilian and military armored vehicles and critical infrastructure. Secur® withstands ballistic impacts and physical attacks while maintaining optical clarity.

#### — ProtectPlus+

An advanced solution for multi-hit protection, ProtectPlus+balances lightweight design and superior ballistic resistance. It meets international standards such as EN 1063 BR4 and VPAM PM4.

## — HyperArmor

This hybrid solution combines glass, plastics, ceramics, and polycarbonate to deliver protection against military-grade weaponry, grenades, and rapid fire. Certified to STANAG Level 4, HyperArmor achieves up to 40% weight reduction without compromising performance.

### — OmniLite<sup>®</sup>

A multilayered solution featuring glass and polycarbonate, OmniLite® offers unparalleled clarity, flexibility, and strength for industries like aviation, architecture, and rail.



# Our Commitment to Sustainability

Isoclima integrates **sustainability** into every aspect of its operations, from product development to manufacturing.



Key initiatives include: Key sustainability initiatives include:

- **Solar radiation control systems** to reduce energy consumption and greenhouse gas emissions.
- Innovations in lightweight materials to minimize environmental impact.
- Alignment with **ESG** (Environmental, Social, Governance) principles to ensure sustainable growth.

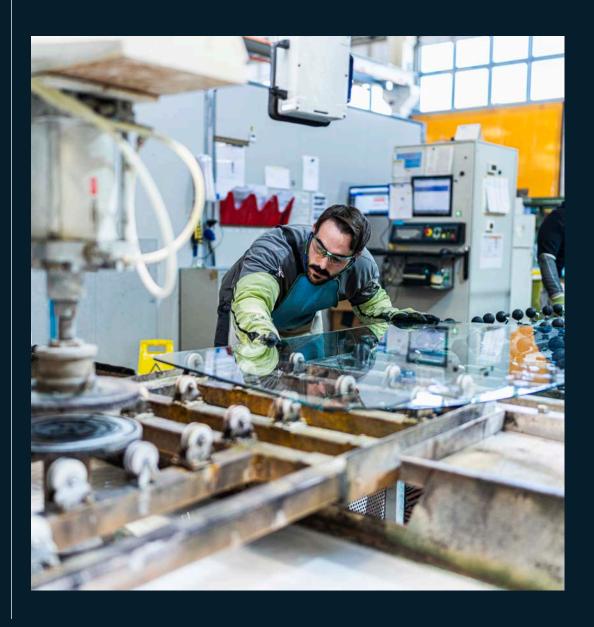
Our focus on sustainability not only reduces the environmental footprint but also delivers practical benefits, such as energy savings and enhanced customer comfort.



# Why Choose Isoclima?

At Isoclima, we understand that complexity and customization are key to success. Our solutions are unified by advanced technologies and a cross-sector approach that combines expertise in security, aesthetics, and performance.

From Leisure (Supercars) to Defense and Security (Military Vehicles) and Sustainability (Rail and Architecture), Isoclima delivers transformative solutions that stand out in industries where quality and innovation are paramount.





www.isoclimagroup.com

