

ARGO BOND

custom  
engineered  
precision  
extruded **ArgoBond®**  
interlayer  
films  
and  
edge seal  
for glass  
lamination



**Argotec**<sup>®</sup>  
*Urethane Film & Sheet*

THE CLEAR CHOICE

# Why are most TPU-bonded aerospace canopies & windows made with Argotec optical interlayer films?

*For the same reasons we are a leading supplier of polyurethane interlayer for laminated glass worldwide*

Glass laminators and specifiers of bullet-resistant and other laminated glasses around the world, both commercial and military, know that the highest quality standards are found in the aerospace industry. Which is why the vast majority of all TPU-bonded aircraft canopies and windows are laminated using Argotec optical interlayer films.

The unmatched optical clarity, layflat, and overall quality of our **ArgoBond**® brand films make Argotec a leading supplier of polyurethane optical interlayers for glass lamination worldwide.

## EXPERIENCE

Since 1988 Argotec has supplied interlayer films made from the vast majority of aliphatic urethane resins available on the market.

**ArgoBond** films are specified in UL-approved installations, including embassies, correctional facilities, banks, hurricane-resistant buildings and wherever extremely high strength and impact resistance is required. They may also be used in decorative and switchable laminated glass applications.

## QUALITY ASSURANCE

Argotec's Optical Films Division utilizes digital camera inspection on all its interlayer film production lines. These computerized systems are capable of detecting and documenting pin holes, voids, gels, wrinkles, streaks and dark or light contaminants as small as 0.3 mm (0.012 in.).

In addition, the company's interlayer extruders are housed in an 8,000-square-foot atmospherically controlled hard-walled white room with each extrusion line in its own ISO Class-7 soft-walled clean room. The result? The cleanest, most optically clear films in the industry.



**Unmatched optical clarity, lay-flat and overall quality**

## THE RIGHT PRODUCT

**ArgoBond** films are engineered to work correctly in the laminator's equipment, whether autoclaves, nip rolls or bladder presses. They lay up well, are not tacky and laminate with minimal voids.

Available in roll widths to match the lamination process, Argotec is the only manufacturer currently extruding 75- and 100-mil product without doubling up via multilayer constructions to provide these thicker films.

## INDUSTRY LEADING TECHNICAL SUPPORT

Engineers at the **Argotec Innovation Center** stand ready to interact with process engineers at the customer's location



**Compatibility with all types of electronic films, excellent hot- and cold-temperature characteristics, and superior electrical insulation properties make **ArgoBond** films ideal for use as an adhesive layer between glass and the electronics of touchscreen monitors.**

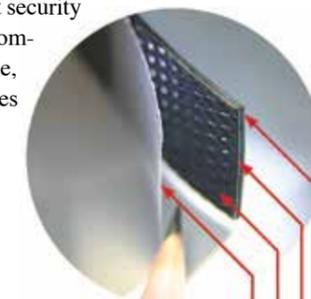
to ensure that all **ArgoBond** films perform properly in their production processes. They are also available to test the newest resins, engineer distinct formulations, and to troubleshoot both new and existing applications.



**Outstanding optical clarity is seen through ten layers of TPU-laminated glass.**



**Super-strong glass composites made with **ArgoBond** optical interlayer films are used in armored vehicles, correctional facilities, banks, and other commercial and military applications requiring ballistic or blast-resistant glass.**



The clear, diamond-pattern-embossed carrier may be removed following lamination to the composite edge

A thinner layer of black TPU cushions the edge of the glass composite and accepts the embossed pattern of the carrier through the autoclaving process for an aesthetically pleasing look

The foil layer provides dramatically enhanced moisture and solvent resistance

A thick adhesive layer of clear TPU bonds **ArgoEdgeSealPLUS**® to the glass laminate

\* Patent number 12/714,569





## The Clear Choice

Argotec is the clear choice for custom-engineered, high-performance, polyurethane film and sheet for a wide variety of critical “can’t fail” applications. The company has extensive experience in flat-die, cast-on-carrier, and blown-film-extrusion technologies, as well as extrusion coating and multi-layer constructions.

Argotec offers precision film & sheet products made from the full range of extrudable polyurethane resins, as well as copolyesters and other difficult-to-extrude specialty thermoplastic elastomers.

A technical force in the specialty films industry, Argotec continues to set the standard for innovation, capability, and commitment to excellence in film extrusion and customer satisfaction.

This is evidenced by the **Argotec Innovation Center**, the industry’s first-of-its-kind research & development facility devoted solely to advancing the state of polyurethane film and sheet. With a hard-walled white room environment, flat-die and blown-film lab lines, as well as production-level extrusion lines and a fully dedicated research staff, this resource allows Argotec to continue to provide its customers with unequalled technical service for decades to come.

At every step of the design and production process, Argotec adds value.

Argotec is the Clear Choice!



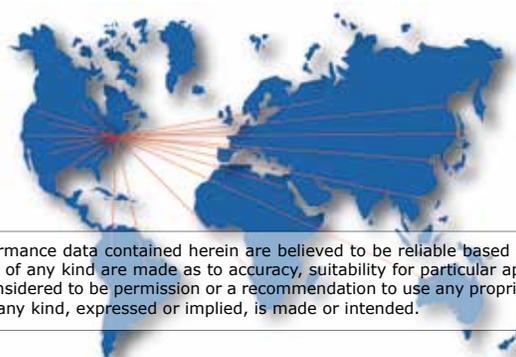
**Class-7 soft-walled clean rooms inside 8000 square-foot hard-walled white room**



**Flat-die and blown-film lab lines enhance the Argotec Innovation Center's capabilities**



**Digital in-line gauge control and photographic inspection systems help ensure the best possible film quality**



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