

The Polyvinyl Butyral (PVB) interlayer solution for innovative laminated architectural glazing

OUR VALUE PROPOSITION

- Consistent quality delivered
- Unbeatable expertise
- Proactive organization
- World-class facilities
- Focus on the architectural market
- International presence
- Drive to succeed with our customers

EVER EXCELLING WE SEEK EXCELLENCE IN EVERYTHING WE DO

We have an unwavering commitment to help our customers grow successfully by delivering best-in-class products, technical expert support and proactive customer service.

> OVER 25 YEARS' EXPERIENCE

TECHNICAL EXPERTISE AND HIGH QUALITY MANUFACTURING For over 25 years we have been producing the highest quality Polyvinyl Butyral (PVB) interlayer for laminated safety glass. We know the business inside out and bring innovative solutions to the toughest challenges to meet the needs of our customers. This is the foundation of our reputation and why many laminators worldwide have qualified our EVERLAM™ PVB interlayer.

EVER PROTECTED PVB, A TRULY BRILLIANT MATERIAL

Although 80 years old, PVB is as solid as ever! Developed during the 1930s, it was first tested and used in automotive windshields. It was later adapted for use in architectural applications, where it has been used successfully for more than 40 years!

EVERLAM[™] PVB is now widely recognized as the preferred material for making the laminated safety glass that makes modern buildings safe, more attractive and comfortable to live in and respectful of the environment.

With EVERLAM[™] PVB interlayer, laminators produce the attractive, high-quality and durable laminated safety glass required to meet stringent indoor and outdoor architectural application standards.

EVERLAM™ PVB interlayer: The high impact resistant material	
Elastic	At impact, it absorbs the energy from a shock through impressive elongation (up to 250% longer).
Adhesive	It holds glass together and ensures that shattered fragments of glass remain bound after impact.
Strong	It is extremely difficult to tear.
Durable	It retains its properties over a very long period of time.

EVERLAM[™] PVB interlayer gives laminated glass its properties of safety and security, noise control and ultra-violet (UV) protection, provided it is used properly.

EVER INNOVATIVE

Architects and designers are able to innovate and push the limits of design and environmental challenges through the increased usage of laminated glass. EVERLAM[™] PVB interlayer delivers valuable benefits in shaping tomorrow's cities.

EVERLAM™ PVB INTERLAYER HELPS PUSH THE LIMITS OF DESIGN

COMMERCIAL AND INDUSTRIAL FACADES

Laminated safety glass allows architects and designers to be more flexible in their designs while meeting all other requirements of safety, noise, heat and UV control.

- Keeps building facades together;
- No risk of exploded glass injuring pedestrians or halting traffic;
- Provides superior glass edge stability and resistance to delamination.

BALUSTRADES

Laminated tempered glass has surpassed tempered glass as a preferred material because it is safer and much better at preventing people from falling through in case of an accident.

- Makes strong balustrades;
- Enhances the aesthetics of buildings.

OVERHEAD GLAZING

Unlike annealed or heat strengthened glass, laminated glass used in overhead glazing stays in place when the glass is broken and allows replacement at the building owner's convenience.

- Is a safety and legal requirement in many countries;
- Provides continued protection until replacement can be installed.

FLOORS AND STAIRS

Glass floors and staircases are a key feature of contemporary houses and buildings and offer a stylish, modern touch in renovated traditional buildings. They provide a sense of lightness in a building and an unusual perspective on its structure and space.

- Achieves aerial designs;
- Maintains structure integrity with very minimal metal support.

INTERIOR GLAZING

Clear or colored glass panels are very popular decorative elements for indoors or outdoors. They can be increasingly seen in shops, public places and offices as well as private homes.

- Ensures safety, security, heat and UV protection;
- Allows colorful designs.



RESIDENTIAL GLAZING

Laminated glazing in homes protects the house and its inhabitants against forced entry into the house and burglary. The entire glazing system, and not just the glass panel, needs to be designed to withstand a series of impacts from weapons such as a hammer or a crowbar.

- Provides a range of protection levels;
- Delays a burglar's entry or deters a potential burglar.

BURGLAR RESISTANCE

Different configurations, composed of glass with various treatments and varying thickness and numbers of interlayers, produce different levels of burglar resistance.

- Comes in a range of thicknesses;
- Provides different levels of protection.

BLAST AND EXPLOSION RESISTANCE

Studies indicate that in a blast accident the majority of victims and damages are caused by shattered flying glass hitting people. Laminated glass protects from such risk. Finite Element Modeling software can help define the best design criteria.

- Glass is maintained in place during the initial shock wave and subsequent retracting pressure wave;
- Protects buildings and their occupants;
- Represents a significant reduction in the cost associated with facility damages.

BULLET RESISTANCE

For extremely sensitive premises, bullet resistant laminated glass provides a high degree of safety and security. A barrier to bullet penetration, it helps protect people from bullets as well as from glass fragments ("spall") from the inner side of the protective glass.

- Is a very solid material;
- Can protect people from a large series of fire arms (in specific configurations).

EVER PERFORMING WE COLLABORATE WITH OUR CUSTOMERS TO ADDRESS THEIR CHALLENGES



Great skills and expertise are essential to the manufacture of durable laminated glass to a high specification, as required by modern architectural designs. EVERLAM teams aid customers, designers and architects to meet these challenges through the best quality PVB interlayer and service.

BEST-IN-CLASS MANUFACTURING

Our plant, located in Hamm Uentrop, Germany, is ISO 9001 certified and is where our PVB interlayer has been manufactured for 25 years with the same attention to details. Following strict processes and tight controls, our team has earned a reputation throughout the industry for producing outstanding and consistent quality.

PRODUCT PERFORMANCE TESTING

Our ISO 9001 certified laboratory in Mechelen, Belgium, is equipped with state-of-the-art testing equipment used to perform sophisticated measurements, analyses and data comparisons.

Our **Performance Monitoring Program** is available to all our customers and consists of a series of stringent tests performed on customer laminate samples, including:

- Inspection systems to assess the visual attributes of laminates, including color assessment by eye, as well as the use of specific equipment;
- Physical measurements to measure parameters such as impact resistance, adhesion of the PVB interlayer to glass, moisture level in the PVB interlayer, etc.;
- Chemical techniques to verify the material's composition.

Additional, finer quality tests are often required to identify and solve more complex issues. Carried out on demand, they consist of more detailed analysis of the material's construction, its stiffness, tensile strength, long-term resistance to heat or cold, consistency of coloured material over time and more.

From the range of tests we regularly carry out, we are able to provide customers with valuable insights and informed recommendations that help them solve a variety of technical issues.

TECHNICAL KNOW-HOW IS A MUST. WE HAVE IT AND SHARE IT.

Manufacturing a PVB interlayer to the highest standards and laminating it so it adheres properly to the glass panels require real know-how as many different factors can impact the quality of the end product: glass cleanliness, quality of the water used to clean the glass, glass cutting quality, glass panel interfaces, level of humidity in the air, etc. Our customers can count on our technical knowledge and expertise, acquired over years of working with them to work out improvements, fix issues and find creative solutions.

PRODUCT DEVELOPMENT

Our team partners with customers to develop laminated glass solutions that enable enhanced performance and architectural breakthroughs. Using our R&D extrusion line and our laboratories in Hamm-Uentrop and Mechelen, we are equipped to pursue an active new product development program.

MANUFACTURING, PROCESS AND PRODUCT OPTIMIZATION

Our technical team fully understands the process details of making a PVB interlayer and laminating it. They are an valuable partner to help customers optimize their manufacturing processes, products and productivity. A central part of our work focuses on:

- Increase the performance of customers' products, e.g. the visual aspect of their laminated glass panels;
- Optimize the capacity and productivity of their plants;
- Help them increase their output without compromising quality;
- Shorten valuable time in production startup;
- Training in a variety of fields related to laminated glass industry, such as laminating, autoclaving, quality control, etc;
- Technical lamination support during the start-up and product qualification;
- Product quality evaluations and performance specifications.

EVER SUPPORTIVE WE PROVIDE GLOBAL SUPPORT AND ADVICE

From factory to customers, we pay attention to every detail to improve our service to customers and contribute to their business growth.

In the area of supply chain, we constantly review our equipment and methods to improve performance. Some of our latest improvements are:

- Re-designed packaging to allow more effective and timely transportation of our products;
- Upgraded transport fleet with an extra temperature control system that provides the additional guarantee that our product is transported in the appropriate conditions;
- Safety stock available in all regions to ensure customers that the product they need is available at all times.

SERVICE EXCELLENCE

Service excellence is a true commitment from everyone in the company. Our people are trained to provide the best sales and technical support, quick response time, on-time product delivery. Empowered to make decisions, they go out of their way to solve challenges efficiently.

We believe that collaborating with our customers creates a successful partnership. We invest heavily in our team and equipment to bring customers the best level of service.



WE ARE A PROACTIVE ORGANISATION:

- Non rigid approach to serving customers;
- Personalized customer relationship;
- Preference for proactive, direct contact;
- Fast response time to customer requests;
- Assurance that orders are delivered when needed;
- Trained to seek solutions and make decision at all levels;
- Collaborative working relationship;
- Multilingual capabilities.

EVERLAN BRILLIANTLY PROTECTED.

GLOBAL FOOTPRINT

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We are organized to support our customers' growth anywhere in the world.





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