



A bond that lasts.

Glasslines Toughened
Laminated Safety Glass



What is Toughened Laminated Safety Glass?

Custom laminating permanently bonds two or more panels of glass with structural interlayers to achieve vastly increased strength over regular laminated glass. These interlayers open up almost limitless applications for glass, including swimming pool walls, stair treads, floors, ceilings, and more.



SECURITY
GLAZING



STRUCTURAL
GLAZING



WATER
RESISTANCE



SUSTAINABLE



UV PROTECTION

SentryGlas®

Structural Architectural Interlayer

SentryGlas® is an advanced interlayer for laminated glass that delivers exceptional strength, safety, and durability.

Its high-performance composition offers five times the strength and up to 100 times the rigidity of other interlayers, making it ideal for structural applications. SentryGlas® structural interlayer holds the barrier up during a dual-pane glass fracture, continuing to provide a level of protection from falling.

SentryGlas' superior strength means:

- Larger glass panels with less visible support, creating sleeker, more open spaces
- Enhanced safety in the event of breakage, as glass fragments remain firmly bonded to the interlayer
- Improved security, offering better protection against forced entry

Applications.

STRUCTURAL GLASS FACADES

Adds strength and durability for large, unsupported glass walls.

BALUSTRADES AND RAILINGS

Provides safety and impact resistance for glass barriers.

SKYLIGHTS AND CANOPIES

Enhances safety while maintaining clarity in overhead glazing.

GLASS FLOORS AND STAIRCASES

Increases structural integrity and support for walkable glass surfaces.

SECURITY GLAZING

Adds a layer of safety for doors, windows, and partitions in high-security areas.

MUSEUM DISPLAY CASES

Ensures high clarity with extra protection for valuable exhibits.

HURRICANE AND BLAST-RESISTANT WINDOWS

Improves protection against extreme weather and high-impact forces.

EVASAFE

Ethylene Vinyl Acetate

EVA (Ethylene Vinyl Acetate) laminated glass offers enhanced durability, excellent clarity, and long-lasting performance in demanding environments.

The EVA interlayer bonds glass layers together, providing strong impact resistance and improved safety by holding shattered glass in place. EVA laminated glass is highly resistant to moisture, UV radiation, and extreme temperatures making it ideal for both interior and exterior applications.

EVASAFE's excellent moisture resistance translates to:

- Ideal for bathroom and poolside applications without risk of clouding or delamination
- Longer-lasting clarity in outdoor installations, maintaining the view for years to come
- Reduced maintenance and replacement costs over time

Applications.

INTERIOR PARTITIONS AND DOORS

Offers clarity and safety for glass dividers and doors in residential and commercial spaces.

SHOWER ENCLOSURES

Provides moisture resistance and long-lasting clarity in humid environments.

SKYLIGHTS AND ROOFS

Enhances UV resistance and durability for overhead glazing.

DECORATIVE GLASS

Ideal for custom shapes and designs due to its flexible processing capabilities.

SOUNDPROOFING WALLS

Adds acoustic insulation for quiet environments, such as offices and studios.

SECURITY GLAZING

Increases safety for windows and doors in high-security applications.

DISPLAY CASES AND SHOWCASES

Provides protection and UV stability for retail and museum displays.

Delivering real value is the Glasslines promise.

At Glasslines, we go the extra mile to deliver what really matters to our customers:

- High-quality, clean and accurate panels for fast & efficient installation
- No interlayer 'overflow' causing costly clean-up time
- Accurate panel dimensions and exceptional panel alignment
- Fully compliant to NZ standards with independent certification
- Guaranteed delivery date fulfilment
- Consistent edge work finish



Setting the standard in glass performance.

How toughened laminated glass compares to traditional PVB laminated glass:

- SentryGlas is up to 100 times stiffer and 5 times stronger
- EVASAFE offers superior moisture resistance, reducing the risk of delamination in wet environments
- Both options provide enhanced clarity and UV protection, maintaining their appearance for longer

Our toughened laminated safety glass contributes to sustainable building design:

- Improved energy efficiency due to better insulation properties
- Longer lifespan, reducing the need for replacement and waste
- Potential to contribute to Green Star and Homestar ratings
- 100% recyclable at the end of its life



Glasslines Laminating Capabilities.

LAMINATE TYPE	MAX SIZE*	MIN SIZE	MAX THICKNESS	MIN THICKNESS	INTERLAYER OPTIONS
SENTRYGLAS	4mm 1200x2400	250x300	40mm	8.76mm	0.76, 1.52, 2.28
	5mm 2100x3300				
	6mm+ 2300x3300				
EVASAFE	4mm 1200x2400	250x300	40mm	8.38mm	0.38, 0.76, 1.14
	5mm 2100x3300				
	6mm+ 2300x3300				

(*) Toughened Glass maximum size. For maximum annealed size please contact Glasslines.