

Window Films: Providing Safety and Security, for Peace of Mind

Window Films provide safety, security, solar control, privacy and decorative advantages for building and transportation glazing.

Window films help hold glass together in the case of breakage, decrease the shatter of glazing, and minimise spalling.

Glass is a delicate and fragile material that can cause accidents when broken. By increasing the integrity and shatter resistance of glass in both automotive and building applications, safety and security window films help hold breaking glass in place, minimising the risk of injury.

Benefits



Improves the safety of glazing



Minimises accidental breakage



Protects against adverse weather conditions



Increases resistance to impact, shatter and spall

Window Films Improve the safety of glazing

Glazing can represent an important surface for buildings. As its use keeps increasing in the construction and automotive sectors, so does the risk of collisions, accidental breakage and personal injury.

It is also frequently the most vulnerable part of a building, making it a target for thieves and vandals.

Window films can improve the safety of glazing without changing its appearance. It is non-disruptive to install and requires no additional maintenance or operation.

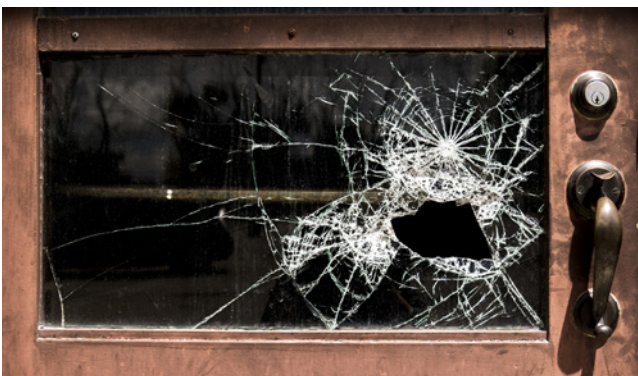


Window Films Minimise accidental breakage

Accidental breakage can occur when people or property come into contact with glazing.

If impact with glazing does occur and the glass breaks, safety window films ensure that it breaks safely and is held in place.

This reduces the severity of immediate injury, and risk of subsequent injury.



Window Films Protect against adverse weather conditions

Powerful winds, hurricanes or earthquakes can be damaging to people and property. Substantial damage can be caused by wind-borne debris such as roofs, trees, doors, etc., colliding with glazing. In addition, if glazing shatters and an opening is created, wind pressure inside a building can cause walls and roofs to collapse.

Safety window films add shatter and tear resistance to glazing, helping to absorb the impact of any debris, and helping the glass to remain intact during adverse weather conditions.

Window Films

Increase resistance to impact, shatter and spall

In the case of forced entry and theft, access to a building or vehicle is frequently gained through glazing. Security window films increase the shatter and tear resistance of glazing, holding the glass in place after impact.

This increases the difficulty and time required to gain entry, and can therefore deter access to all but the most determined intruder.

When a pane of glass is attacked directly, or if a projectile is thrown at it, the projectile itself can cause harm to occupants. The glass spall can be equally as dangerous. Glass spall occurs when a projectile causes glass to break into fragments which travel in the same direction as the projectile.

Security window films help hold the glass in place, reducing spalling and protecting occupants.

In the case of a blast, window films also help mitigate damage. The majority of injuries associated with bomb blasts are not caused by the blast itself, but rather by the glass shards from surrounding windows and doors that are blown out by the shockwave.

Safety window films help hold the glass in place. Safety can be further improved with the use of an edge retention system, which holds the combined glass and film to the window frames. A variety of such systems are available.



Fact

A bomb blast turns unprotected glass into dangerous flying shards that can travel at speeds in excess of 30 meters per second. That's more than 100 km/hour! Window films help protect and mitigate blast damage.

Selecting and Installing the Right Window Film

Window films are highly engineered, optically clear, polyester film composites. They undergo various treatments to provide safety, security, solar control and decorative enhancements for building and transportation glazing.

Window films are available in a variety of grades, shades and tones and varying levels of performance, thickness, and certification.

The correct product will depend on many factors such as the building and glass specifics, or the vehicle's requirements - and the combination of benefits desired.

Professional Installation

Safety window films are cost effective and non-disruptive to install. However, professional installation is highly recommended to ensure that the full benefits of safety window films are achieved.

Always seek professional advice from an EWFA member company.

(Link: <https://iwfa.com/ewfa/en-us/Membership/Our-Members>)

Performance, Testing and Certification

Window film manufacturers extensively test their products to ascertain individual performance and ensure continued durability.

There are many existing standards to which products can be tested – however, safety and security window films are usually tested to the following standards, endorsed by EWFA and its mother organisation, IWFA (the International Window Film Association):

- **Impact Resistance** - European Standard EN12600
- **Forced Entry** - European Standard EN356
- **Blast** - International Standard ISO16933

Contacts

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