



### FACTS ABOUT USE OF SAFETY/SECURITY WINDOW FILMS

Safety/security window films are designed to help hold glass fragments in place after glass breaks. Solar energy-saving films and decorative films are manufactured to be energy efficient or provide certain design and styling benefits, but any glass breakage protection is only a side benefit and should not be a reason for buying such a product. Although there may be some incidental added safety to any window covered by any type of film, there is no intended safety/security benefit unless the product is tested and listed as such by its manufacturer. Consumers should ask to see film manufacturers' literature which states the specific benefits of each particular product.

Safety/security window films applied to glass are tested to the same break safe standards required of tempered glass, heat-strengthened glass, and laminated glass. Window film manufacturers have copies of the actual laboratory test reports validating that their products do, in fact, meet specific impact testing.

Upon repeated impacts to the same area, films can begin to tear due to the edges of the broken glass fragments penetrating the thickness of the film. This means that, in general, although films can help greatly by reducing glass hazards upon initial impact, with repeated impacts they may not continue to perform as well. Thicker films and films made from multiple layers (laminated films) perform better, in general, in situations where there will be repeated impacts to the glass, even after breakage has occurred. Just because a product may be able to pass the Dade County small missile impact requirements, it does not mean the product can get Dade County Product Approval, as it may not be able to withstand the repeated impact cycling part of the approval process. As of the summer of 2005, the window film industry trade associations are not aware of any window film product which can meet the large missile impact test. Any claim by the seller of a product should alert the consumer to ask for a copy of the actual written approval for the specific product in question.

Safety/security films are used extensively by government agencies and large corporations for increased protection from the hazards of flying glass fragments during bomb blasts or other types of weaponry attacks. There are published standards of performance at different levels of protection established by the General Services Administration, and most film manufacturers have many products tested and approved for these uses.

Films can be installed (1) on only the daylight area of the glass, or (2), if the frame is removed and replaced, on the entire glass surface (called an edge-to-edge installation), or (3) can be part of a film attachment system. Films installed on the daylight portion only hold the glass together and in the frame so long as some of the glass edge remains unbroken along the line where the daylight part of the glass meets the frame. Once there is total edge break of the glass itself, then the film and broken glass held by it vacate the frame. Films installed edge-to-edge hold glass in the frame better since a part of the film is installed on the glass under the frame, thereby holding the broken glass in place even with total daylight area glass breakage. Films installed as a part of an attached film system are "anchored" to the window frame itself, using either a structural silicone adhesive or a mechanical device (or both). Here the film becomes a flexible membrane holding the glass fragments together.

### WHERE TO GET MORE FACTS ABOUT SAFETY/SECURITY FILM USES

- [www.iwfa.com](http://www.iwfa.com) International Window Film Association
- [www.protectiveglazing.org](http://www.protectiveglazing.org) Protective Glazing Council
- [www.protectingpeople.org](http://www.protectingpeople.org) Protecting People First Foundation
- [www.safeamerica.org](http://www.safeamerica.org) SafeAmerica Foundation
- [www.oca.gsa.gov](http://www.oca.gsa.gov) General Services Administration