



Bekaert Specialty Films, LLC

SAFETY – SECURITY FILM AND HURRICANE PROTECTION

For many years safety and security film have provided significant protection for glass in windows and doors when exposed to hurricane conditions. Although this protection has been documented in real life conditions and proven in tests, the application of the film on glass is not considered a “storm mitigation” device by building codes, nor some insurance regulations. The current building codes for new construction require that the entire system be tested if a material such as film is applied to the glass. This would mean that we would have to test each and every type of window and door in the market place to which the film could be applied and this is just not possible. What we have done is to test our 8-Mil film to the same standards as used by the Florida Building Code in order to determine its performance.

The film was subjected to the conditions as per the ASTM E-1886 and E-1996 for impact and cycling. The large missile used in the tests was the 4.5 lb. 2X4 which impacted three specimens at a speed of 40 feet per second. The impacted specimens were then subjected to air pressure variations up to 50 lbs. per square foot which equivocates to a wind speed of up to 140 miles per hour. The specimens were cycled in variations of pressure from 10 lbs. per square foot to 50 lbs. per square foot for 4,500 cycles both positive and negative pressure for a total of 9,000 cycles. The 8-Mil film when anchored on all four sides with a Dow 995 structural silicone sealant met the requirements of the standards. This meant there was no penetration of the film great enough to air passage through the specimens. Additional specimens were subjected to ASTM E-330 and E-331 for water and air infiltration with no failures.

The film starts offering its protection from the moment it is installed. There is no maintenance other than occasion cleaning with a soft cloth with soap and water. It allows complete vision and if a solar version is selected, it provides additional comfort and energy savings. There is no rush to install anything when a storm approaches since the glass has already been given protection. While the film may keep the glass from breaking due to impact, the purpose of the film is to keep the glass contained if broken. The additional anchoring will hold the broken glass in the frame when exposed to wind speeds of up to 140 miles per hour.

Cont'd.

Page 2, Safety – Security Film

Based on test reports and evidence from previous hurricanes, some insurance companies will extend discounts for the application of film which meets some criteria of performance. This should be discussed with your insurance carrier prior to the installation of the film to determine its acceptability for this purpose.

So, as you can see, film can afford significant protection and will not impede your view, once installed. This is true passive protection and will require no effort on your part if a storm approaches. This is especially important if you are not at home when the storm approaches or have to evacuate with little or no warning.

Although, as stated before, the film will not make your windows code compliant but it will provide significant protection at an affordable price when compared to other forms of protection available.

Your dealer can provide additional information regarding the selection of the film and will also provide copies of the test reports if required.

BEKAERT SPECIALTY FILMS