

Missile E Impact-Resistant Windows

WINCO Window Series 1150, 11508, and 3250 are tested to meet Missile E Impact- Resistant guidelines according to the ASTM E1996 two-part testing protocol that governs Large Missile Impact.









Part one of ASTM E1996 involves shooting the window with a 2x4 at a specified length, weight, and speed to damage the glass while part two of the test engages a pressure cycling sequence simulating a hurricane.

Large missile impact window systems rely on the strength and stiffness of the laminated lite for impact resistance. The exterior 1/4" sacrificial lite allows for meeting the architecturally desired colors and low-E coatings. This sacrificial lite shatters upon impact as intended while the laminated impact lite will crack but remain intact. The laminated lite stops the missile and prevents the window opening from being breached during a storm. The interior laminated lite is designed to be strong enough to remain intact during a hurricane even if it is cracked by a large piece of debris in order to keep occupants safe and preserve the structural integrity of the building.

Missile E is specifically used for essential buildings such as police stations, fire stations, emergency operations, hospitals (where people can't evacuate), and community storm shelters. Glass is important in the design of these buildings to allow light in and remain operational in emergencies.