

Intercept® Test Procedure Definitions

ASTM F-1249: A test designed to determine the rate of water vapor transmission through flexible barrier materials.

ASTM-2188/2190: High Humidity : IG samples are subject to high humidity and temperature. The objective is to force moisture into the hermetically sealed cavity of the IG unit. 95% relative humidity at 140°F (60°C). 4 weeks high humidity; 9 weeks accelerated weathering and 2 weeks high humidity. Accelerated Weathering Cycling is used to simulate weather cycling from hot to cold extremes with moisture added during the hot cycle. IGU's are exposed for 63 days, 252 cycles with each cycle lasting 6 hours. Temperature fluctuates between -20°F and +140°F. UV light and spray mist are applied during each cycle. Final dew point: -40°F or colder.

ASTM-2189/2190: This test is used to show that the components in an insulating glass unit will not out-gas a volatile fog, which could result in a visual deposit on the interior glass surface. Units are fully immersed in a heated box with an ultraviolet lamp for 7 days of exposure. Glass temperature at 50°C (122°F). Condenser plate temperature—21°C (70°F). Units are then removed and placed in a special viewing box and examined for fogging in the airspace of the glass.

CSTB Shear Test: Sample is subjected to 10kg (22lbs) shear loading for seven days at 50°C (122°F). Maximum allowable glass/glass movement is 0.100 inches.

Miami Dade Large Impact Missile Test: A test designed to simulate the effects of large wind driven debris on products installed up to 30 feet above grade. A sample is subjected to a 9lb missile fired from a cannon at 34 mph. The missile cannot penetrate the glass or the subject fails.

Miami Dade Small Impact Missile Test: A test designed to simulate the effects of small wind driven debris on products installed up to 30 feet above grade. A sample is subjected to small missiles and severe wind cycling. The missiles cannot penetrate the glass or the subject fails.

EN 1279 (Parts 2 and 3): European insulating glass testing standards. Part 2: the long-term test method and requirements for moisture penetration; relates to all unit manufacturers. Units are exposed to cycles of temperature and humidity. Levels of moisture in the unit are measured before and after climate testing to indicate the amount of moisture entering the unit (ie the effectiveness of the seal to keep moisture out) and the ability of the desiccant to absorb any moisture that does enter. Part 3: Long-term test method and requirements for gas leakage and gas concentration tolerances. Testing takes approximately 10-13 weeks and requires six test specimens of dimensions 502 ± 2mm and 352 ± 2mm.

GED Integrated Solutions
9280 Dutton Drive
Twinsburg, Ohio 44087
330.963.5401
Fax: 330.963.0584
www.gedusa.com

GEDUSA®

For More Information, Contact Your
GED Sales Representative
at 330.963.5401

References: www.aamanet.org; www.energystar.gov; www.igmaonline.org,
www.wdma.com; www.cwdma.ca & www.childternfire.co.uk

