

Markar Continuous Hinges

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Markar Continuous Hinges: Durable . . . No matter which way the wind blows.

Markar Architectural Products is proud to announce that windstorm/hurricane testing on Markar continuous hinges was recently completed with UL, and was subsequently reviewed, passed and approved by the Florida Building Code Commission in January of 2008. There were three categories of testing conducted on the hinges: an Impact Test (TAS 201), Static Load/Cyclical Test (TAS 202), and a Water and Leakage Test (TAS 203). Markar excelled in all three categories of testing.

The TAS 201 Impact Test is a missile/projectile test where a 2 x 4 piece of lumber is shot from a cannon about 25 feet away from the door, at an average speed of 80 mph – generating approximately 350 ft.-lbs. of force. This is done to see if the door actually moves out of the opening. Since the hinge is an integral part of a door opening, the projectile is shot toward the hinge, or toward the locking mechanism – anywhere the personnel performing the test think they can get the door to move out of the opening.

After this first test, if the door is secure to the eye, the TAS 202 Static Load/Cyclical Test is performed. This test is designed to emulate a hurricane – basically wind pressure pulls the door in from the opening, and pushes it out of the opening at a +/-70 lbs of pressure to see if the door will warp or if any of the components will fail. An inferior hinge will cause the door to pull out of the opening, or create a situation where a door can't be opened – a critical life safety issue.

At that point, if the door and hinge still have no failures visible to the naked eye, the TAS 203 test is performed, which is a water and leakage test. In this test, a water hose is placed on the outside of the door, toward the top. A reverse blower is switched on, which sucks from the inside – artificially trying to draw water into the building via the door. If there are any failures, they are easy to spot, since the water will seep in.

The TAS 203 is the test most manufacturers fail, but Markar hinges easily passed all three tests on the first attempt. It is notable that the passing results were even achieved with 1100 Series Aluminum Hinges – Markar's entry grade model.

Based on this performance, the FBC approved all Markar hinges in the following series:

(Up to openings of 4'0 x 8'0 singles and 8'0 x 8'0 pairs)

- 100 – Aluminum
- 200 – Cold Rolled Carbon Steel
- 300 – Stainless Steel
- 3500 – Stainless Steel (Security Grade)
- 1100 – Aluminum

Markar hinges are made to last for years, regardless of the weather.

**ASSA ABLOY**