

ASP 31-243

Miami-Dade County Certified Skyline[®] Air Handlers for Hurricane Mitigation

(NOA# 07.1003.03)

Does Daikin have air handling equipment that meets coastal construction requirements for hurricane mitigation?

Daikin has a full range of Skyline outdoor air handlers (up to 96" high by 96" wide in all lengths) specially designed to mitigate against damage from hurricane and tropical wind storms, water intrusion and windborne debris. All are certified by an independent laboratory to meet the stringent Miami-Dade County, Florida criteria for impact resistance, air and water infiltration, and wind load resistance at air pressures up to plus-and-minus 75 pounds per square foot.

About Hurricane Mitigation

Hurricane mitigation measures focus on steps that can be taken to lower the likelihood of damage to building components and structures from hurricane-force winds, air pressures and airborne projectiles. Miami-Dade County requirements are generally considered the most stringent for hurricane mitigation and rely on self-developed testing methods TAS 201, 202 and 203.

Passing the tests prescribed by the TAS norms is required for products approved for use in the Florida High Velocity Hurricane Zone (see map on page 2). The Florida Building Code will accept testing performed by TAS methods for inclusion in the FBC Database of approved building products. Many other state and local codes also accept TAS methods.



Miami-Dade County Certified Skyline Air Handlers

Certification test requirements for air handlers include a large missile test and an extreme pressure test. The large missile test consists of a 2" × 4" board fired from a pneumatic air gun at 50 FPS at the cabinet wall three consecutive times without penetrating the panel surface.

For the extreme pressure test, the air handler is subjected to 1.5 times the design pressure of the unit, both positive and negative. The air handler must hold together for 30 seconds in both instances.

Tests are performed by an independent test agency and results verified and submitted by a State of Florida-certified PE. Both Miami-Dade County and the State of Florida maintain web-searchable databases of products approved for use as hurricane protection. These include actual test results from certified independent testing laboratories and Product Approval Drawings or Installation Instructions which describe exactly how a rated product is to be attached to a building.

The Miami-Dade Building Code Compliance Office issues a Notice of Approval (NOA) for certified products. The NOA details how the product is fabricated and installed and includes all the components that were tested as part of the system. Maximum sizes and maximum design pressures are also included. Each Skyline air handler that is specified for hurricane certification is furnished with an NOA label.

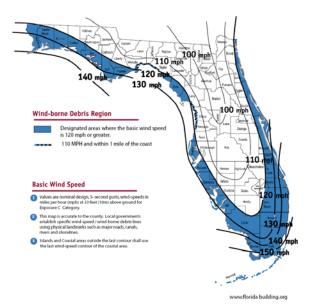
Hurricane Mitigation Features

- Extra heavy-duty construction. Skyline units certified for hurricane mitigation are factory equipped with a heavy gauge outer steel finish to resist penetration from flying projectiles. Doors are equipped with heavy-duty latches and additional hinges to withstand extreme pressures. Internal frame channels are equipped with extra bracings to resist damage from high winds and extreme pressures.
- Meet requirements for hurricane mitigation in the High Velocity Hurricane Zone (Miami-Dade and Broward Counties). Products that have been approved to comply with these requirements are deemed capable of withstanding the strongest winds in the country.
- Certified for maximum design pressures of up to 75 pounds per square foot, both positive and negative. This product is rated as a wind zone 4, missile level D product and is applicable in each the HVHZ and Non-HVHZ areas of Florida
- Certified for large missile impact resistance. Per the Florida Building Code, this qualifies units for usage at ground level or above. Units that are certified for smallmissile impact resistance only qualify for usage at 30 feet or more above ground level.
- Certification includes complete, approved instructions for anchoring the unit to the ground (cement slab) or building roof. This eliminates the need to employ a professional engineer to specify anchoring methods, thus significantly reducing installed costs. Certification drawings for most competitive units do not include these instructions.



Other Key Features of Skyline Systems

- Unique, custom-modular platform and Variable Dimensioning^w design allows you to mix and match factory option components to configure the optimal air handling system for your application.
- Patented, gasketed frame channel, double-wall, injected-foam panels and cross-broken top panels keep conditioned air inside the cabinet and Mother Nature outside. The result is lower operating costs and superior indoor air quality (IAQ) over years of reliable service.
- ETL/c-ETL listed to meet the requirements of UL1995 and CAN/ULC-S102 for flame and smoke spread, and have been tested against the requirements set forth in the NFPA 90A Standard.



Miami-Dade County certified Skyline outdoor air handlers are certified for coastal construction where the risk of hurricane damage is highest.