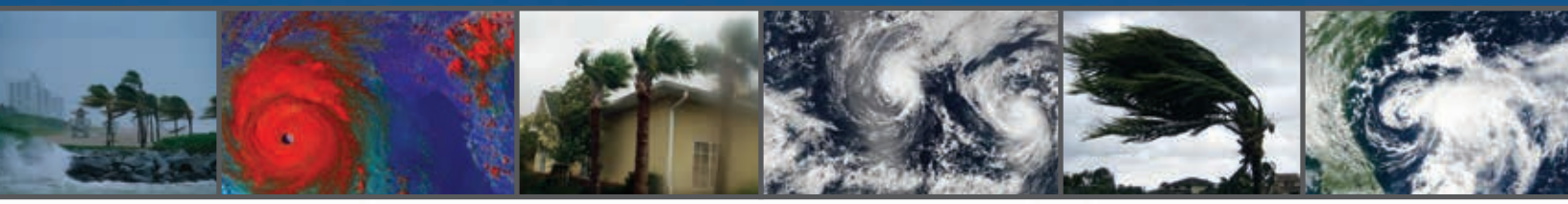
Laboratory Exhaust Systems
Vektor®-H and Vektor®-HS
• High Wind and Hurricane Certification



Miami-Dade NOA Certification

The Vektor-H and Vektor-HS are the industry's first laboratory exhaust fan systems to be certified to high wind standards.

Advantages of NOA Certification

- Pre-certified products mean quicker project approval
- No need to design special enclosures, such as louvered walls, to meet construction requirements
- Reduced building first-cost by eliminating unnecessary duct runs to these enclosures
- No guy wires on standard height units

Vektor-H
High Plume Fan with
Fixed Discharge Nozzle

Vektor®-H is licensed to bear the AMCA Seal

c UL us LISTED

Model Vektor®-H is available with the UL/cUL 705 Electrical Listing File #E40001

UL us LISTED

Model Vektor®-H is available with the UL 762 Listing, Power Ventilators for Restaurant Exhaust Appliances Max. Operating Temperature 400°F File #MH11745

Vektor-HS
High Plume Fan with
Variable Geometry Nozzle

Vektor®-HS is licensed to bear the AMCA Seal

c UL us LISTED

Model Vektor®-HS is available with the UL/cUL 705 Electrical Listing File #E40001

	Vektor-H	Vektor-HS
Volume Range	270 to 24,000 cfm *(460 to 40,776 m^3/hr)*	
Static Pressure	Up to 3.5 in. wg *(875 Pa)*	
Configurations	1x1, 2x1, 3x1	
Wind-Borne Debris Region	+/- 140 PSF	
TAS 201: Large Missile Impact	✓	✓
TAS 202: Uniform Static Air Pressure	✓	✓
ASTM E72 (modified)	✓	✓
Miami-Dade NOA # (Expires: August 28, 2019)	14-0325.05	14-0325.05
Florida Product Approval	FL17237	FL17237
OSHPD (Seismic)	OSP-0223-10	Not available
ANSI/AIHA Z9.5	✓	✓
NFPA 45, 90a, 91	✓	✓
Spark Resistance	Spark B	Spark B

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Building Value in Air.

October 2014

Protocol Descriptions

TAS-201:
Large Missile Impact Test (ASTM E1996)

The Florida Building Code requires that products installed in the Wind-Borne Debris Zone or High-Velocity Hurricane Zone must meet or exceed impact test criteria established under TAS-201. Products may be exempt if utilized in "open" structures or installed more than 30 feet *(9 m)* above grade. This test procedure measures a product's capacity to withstand impact from wind-borne debris under hurricane-force wind velocities.

Test Fan Size: Maximum size selected by manufacturer for certification.

Test Missile: 7 foot *(2.1 m)* to 9 foot *(2.75 m)* long Southern Pine 2 x 4; 9.0 to 9.5 pounds.

Distance from Front of Canon to Face of Fan: 9 feet *(2.75 m)*.

Impact Velocity: 50 feet per second *(15.25 m/s)*.

Procedure: Three specimens are tested. One impact is delivered at the center of each specimen and one impact is delivered at top and bottom of each specimen, for a total of three impacts.

Pass/Fail: Failure occurs if a change in the condition of the specimen results…such as "cracking, fastener loosening, local yielding" or if penetration of the projectile occurs beyond the inside plane of the fan.

TAS-202:
Uniform Static Air Pressure Test (ASTM E330)

The Florida Building Code requires that all products utilized in structures located throughout the state meet or exceed the structural test criteria established under TAS-202.

This test procedure measures a product's ability to withstand maximum static pressure differentials typical to hurricane events.

Test Fan Size: Maximum size to be certified by manufacturer.

Design Pressure (Design Wind Load): Maximum positive or negative wind load to be certified by manufacturer.

Test Load: 2 x the selected design pressure.

Procedure: Specimen is subjected to a series of positive and negative pressures increasing from ½ test load to full test load.

Duration: 30 seconds maximum.

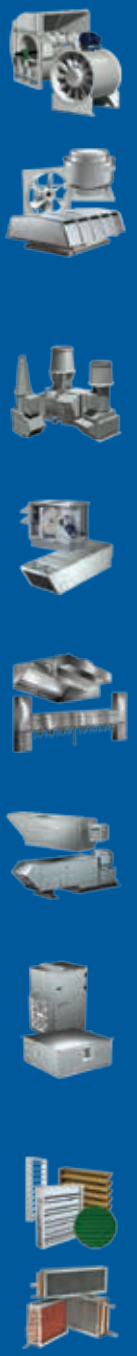
Recovery Period: 1 to 5 minutes.

Pass/Fail: Failure occurs if a change in the condition of the specimen results… such as "cracking, fastener loosening, local yielding" or, if permanent deformation results greater than 80% of maximum allowable deflection.

ASTM E72 (modified)

Standard test methods of conducting strength test of panels for building construction.

Required Products	Applicable For	Description	Protocol Required	Approval Body
Florida Product Approved	Wind-Borne Debris Region	Design Pressure: +/- 140 PSF Large Missle Impact Resistant	TAS 201 TAS 202 ASTM E72 (modified)	Florida Building Code Office
Miami-Dade Qualified Products	High-Velocity Hurricane Zone	Broward and Dade Counties	TAS 201 TAS 202 ASTM E72 (modified)	Miami-Dade Building Code Compliance Office
Florida Product Approved or Miami-Dade Qualified Products (in Dade or Broward counties)	Enhanced Hurricane Protection Areas	Public buildings designed to provide emergency shelter; wind load determined by wind speed map plus 40 mph	TAS 201 TAS 202 ASTM E72 (modified)	Florida Building Code Office or Miami-Dade Building Code Compliance Office
Florida Product Approved	All Other Regions		TAS 202	



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Prepared to Support Green Building Efforts

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