

# Models RV and RVE

High Wind Rated

## High Wind, No Problem!

Select Greenheck RV and RVE units are now available with high wind certification to comply with the Florida Building Code and Miami-Dade County requirements. Greenheck is providing signed and sealed engineering drawings and published literature showing a rating of **125 PSF lateral load and 100 PSF uplift load**.

Miami-Dade County and other adopting areas require mechanical equipment to carry a high wind certification by providing one of the following forms of documentation:

1. A copy of the unit's current Notice of Approval (NOA)
2. Signed and sealed engineering drawings for the model unit covered in the permit
3. Manufacturer's published literature for the unit listing the wind resistance

Models RV and RVE designs have been certified by a third-party consulting engineer out of Miami, Florida.

## High Wind Ratings

The table lists the equipment available with a high wind rating, as well as the actual load ratings.

Greenheck High Wind Rating					
Equipment	Cooling Type	Airflow (CFM)	Tonnage (tons)	Lateral Load (PSF)	Uplift Load (PSF)
RV-25/RVE-40	Packaged DX and Air-Source HP	800-5,700	5-15	125	100
RV-45/RVE-85		2,500-10,000	15-30	125	100
Equipment				Lateral Load (PSF)	Uplift Load (PSF)
14, 18, and 24-inch GKD curbs on above RV/RVE models only				125	100



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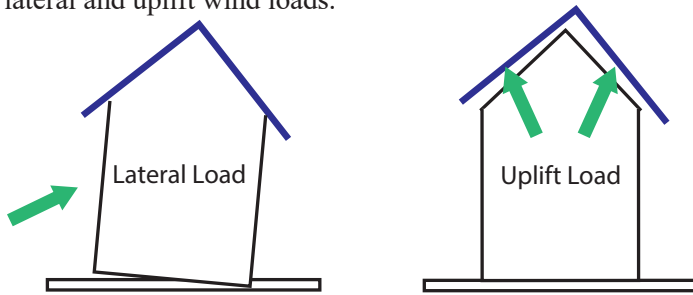


To receive the optional high wind certification on applicable equipment, reach out to your local Greenheck mechanical representative before ordering product.



# Wind Load Calculations

Certain areas, applications, or designs require mechanical equipment to come with certifications for lateral and uplift wind loads.



**Lateral Load & Uplift Load:** This load results from wind that moves parallel to the ground and comes into contact with a surface.

**Uplift Load:** This load results from wind that moves perpendicular to the ground and comes into contact with a surface.

Wind loads are calculated based on the following inputs:

- Installed height of the unit from ground level (ft)
- Wind exposure category (used to determine a safety factor for the application)
  - As building height increases, the safety factor increases and requires the equipment to withstand a higher pressure
- Wind velocity (mph)
- Building category

## Wind Speed

A job may also be designed to meet an ultimate wind speed (mph) in accordance with the Florida Building Code 2017 section 1609. The table below shows the maximum allowable roof height based on exposure and wind speed to meet the **125 PSF lateral load and 100 PSF uplift load** for Greenheck's high wind package.

Cross Reference of Wind Load Rating to Wind Speed			
Ultimate wind speed per FBC 2017 (6th Edition) Section 1609 (mph)	Maximum allowable roof height (ft) above ground for rooftop unit installation (a) (b)		
	Exposure		
	B	C	D
120	500	500	500
130	500	500	500
140	500	500	500
150	500	500	500
160	500	500	445
170	500	350	205
175	470	250	155
180	370	190	105
186	310	145	75
190	275	125	60
200	180	75	35

(a) Table based on wind loads calculated using GC=1.9 for lateral and GC=1.5 for uplift.

(b) Miami-Dade and Broward Counties to use either Exposure C or D as defined by ASCE 7-10.

