



GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES

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DEPARTMENT OF PLANNING AND NATURAL RESOURCES

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FOR IMMEDIATE RELEASE

SPECIAL WIND REGION MAPS NOW ONLINE

Commissioner Jean-Pierre L. Oriol of the Department of Planning and Natural Resources announces that the USVI Special Wind Region Maps are now live on the ***Applied Technology Council (ATC) Hazards by Location Tool*** available through the ATC website at: <https://hazards.atcouncil.org/>. Users can quickly access the site-specific design wind speed information in USVI by searching by address or coordinates (latitude and longitude) within the tool.

The USVI Special Wind Region design wind speed maps have been developed to evaluate the wind speeds that consider topographic effects for use as a simplified method to determine wind loads and pressures on a building or structure. The revised basic wind speed maps do not change the design wind criteria of ASCE 7-16, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*. Rather, these wind speed maps are provided as an additional and alternative method for calculating design wind pressures, which will enable a designer to more quickly and specifically by area to determine wind loads and pressures on a building where topographic effects must be considered without requiring registered design professionals to perform additional, and complex, calculations.

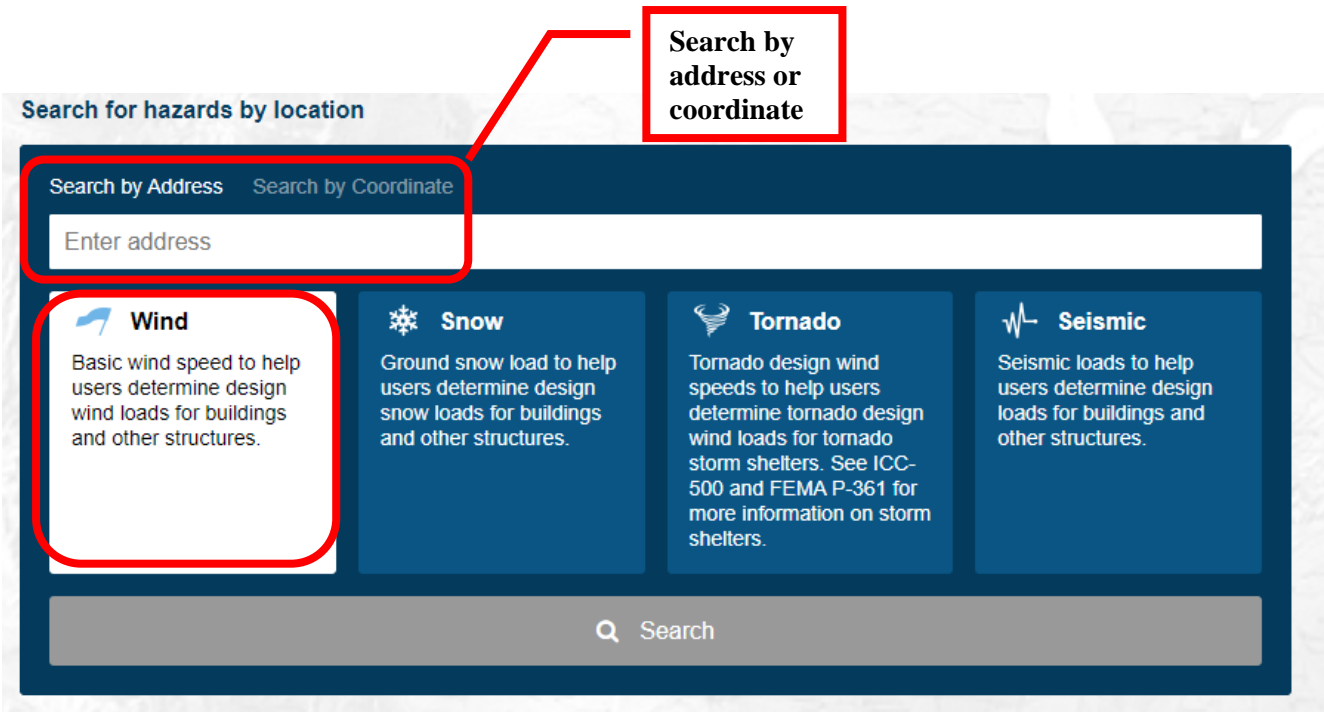
DPNR Division of Building Permits encourages design professionals to use the ATC Hazards By Location Tool and USVI Special Wind Region Maps to ensure that topographical effects will be properly accounted for in design of buildings and other structures in the USVI. DPNR Division of Building Permits staff will begin to use the tool in Plan Review as part of their standard operating procedures. The benefits of this tool include:

- The New Special Wind Region Maps reflect complex topographic effects better than ASCE 7 procedures;
- Special Wind Region Maps are easier to use and to check for proper application;
- A more risk consistent assessment of topographic effects

Integration of this new wind speed data addresses a key finding in the U.S. Virgin Islands Mitigation Assessment Team (MAT) Report, FEMA P-2021, Hurricanes Irma and Maria in the U.S. Virgin Islands, regarding the effects of topography on wind speeds across the islands. Many locations were observed to have experienced higher wind speeds due to the channeling of wind through the mountains. Recommendation USVI-40b from the MAT report concluded that new design guidance for topographic effects in the U.S. Virgin Islands was needed to allow designers to more appropriately address wind speed-up in building design.

For more information, visit <https://dpr.vi.gov/building-permits/> or contact on the Division of Building Permits at (340) 774-3320 on St. Thomas and (340) 773-1082 on St. Croix.

The following images demonstrate how to find site-specific Special Wind Region wind speed information including topographic effects using the ATC Hazards by Location Tool linked above:



Search by Address Search by Coordinate
18.34077790536504 -64.889395236969 Search

- Wind
- Snow
- Tornado
- Seismic

Print these results Save these results

U.S. Virgin Islands Special Wind Region 2019

Contours unavailable.

MRI 10-Year 75 mph

MRI 25-Year 112 mph

MRI 50-Year ▲ 130 mph

You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.

MRI 100-Year ▲ 142 mph

You are in a wind-borne debris region.

Risk Category I 158 mph

Risk Category II ▲ 168 mph

You are in a wind-borne debris region.

Risk Category III ▲ 178 mph

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

Risk Category IV ▲ 182 mph

You are in a wind-borne debris region.

Map Satellite

Special Wind Region wind speed information including topographic effects.

