

WindIQ+™ – ASCE 7 Wind Uplift Calculator September 2026

To: Carlisle SynTec Systems' Manufacturer's Representatives, Distributors, and Authorized Applicators

With the publication of the 2024 International Building Code (IBC) and the ongoing adoption of updated building codes by jurisdictions across the country, Carlisle SynTec Systems is introducing WindIQ+, an enhanced version of Carlisle's existing ASCE 7 wind uplift calculator. WindIQ+ adds ASCE 7-22 to the calculator's existing ASCE 7-05, ASCE 7-10, and ASCE 7-16 capabilities, allowing users to select the applicable ASCE 7 edition based on the building code adopted in their project's jurisdiction.

WindIQ+ is designed to assist Carlisle's Manufacturer's Representatives, Authorized Applicators, and registered design professionals with wind uplift calculations and roof system selection using the applicable ASCE 7 edition for their project.

Key Changes in ASCE 7-22

- Ultimate wind speed maps have minor changes from ASCE 7-16. To determine the ultimate wind to calculate the pressures based on the location of the building, it is recommended to verify the winds based on Risk Category for the building as shown on the ASCE Hazard Tool. (<https://ascehazardtool.org/>)
- The introduction of Chapter 32: Tornado Loads. This includes:
 - U.S. tornado location areas
 - Flow chart to determine if the building should have tornado loads required
 - Calculations specific for tornadoes
 - Eight tornado wind maps for each Risk Category III and IV

New WindIQ+ Functionality

- Support for ASCE 7-05, ASCE 7-10, ASCE 7-16, and ASCE 7-22
- Induction-welded securement option
- Based on location and Risk Category, Tornado Loads are included when necessary
- Extrapolation/interpolation for zone enhancements using the Rational Analysis from the 2025 ANSI/SPRI WD-1

In addition, WindIQ+ saves you a significant amount of time, completing calculations within two minutes or less, compared with up to two hours for handwritten calculations.

WindIQ+ will be available through Carlisle's Design Professionals web page as well as its sales representative and distributor portals. This tool is not meant to replace any state-licensed engineer's published uplift, or to verify licensed engineers' results, nor should be used as verification of warranty criteria.

To learn more about ASCE 7, visit CCM University for applicable courses or attend C.R.E.W. training courses 402 and 502.

For more information or further assistance, contact Carlisle's Design Services Department.