



Informal Interpretation Report Number 8496



Date January 19, 2021

Edition 2010

Section 1605.3.1

Question:

When equipment anchorage on the roof in Miami area is designed using ASD method, wind loads in the ASD load combinations, are the loads calculated based on ASD wind speed or ultimate wind speed?
It appears calculation using ASD wind speed will result in wind pressures that are much less than that based on earlier code editions since 0.6 is used twice (one is in converting ultimate wind speed to ASD wind speed, the 2nd is in load combinations).

Answer

The loads are calculated using the ultimate wind speed (V_{ult}). This results in the nominal, unfactored loads. Section 1609.1.1 "determination of wind Loads, state: "The wind speeds in Figures 1609.3(1), 1609.3(2) and 1609.3(3) are ultimate design wind speeds, V_{ult} , and shall be converted in accordance with Section 1609.3.1 to nominal design wind speeds, V_{asd} , when the provisions of the standards referenced in Exceptions 4 and 5 are used."

The 0.6 factor is used only once, when the nominal load is factored to provide the ASD values.

Commentary:

For future editions, ASCE 7-16 uses the term 'nominal' for the unfactored loads used in the loading combinations, either for Strength Design (Limit States Design or Ultimate Strength Design are other terminologies for this) or for Allowable Stress Design.

Notice:

The Building Officials Association of Florida, in cooperation with the Florida Building Commission, the Florida Department of Business & Professional Regulation, ICC, and industry and professional experts offer this interpretation of the Florida Building Code in the interest of consistency in their application statewide. This interpretation is informal, non-binding and subject to acceptance and approval by the local building official.