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COMMONWEALTH of VIRGINIA

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DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

MEMORANDUM

To: Virginia Approved Compliance Assurance Agencies

FROM: Jeff Brown, Deputy Director

Division of Building and Fire Regulation

DATE: June 11, 2025

RE: 2021 USBC - ASCE 7 Requirements for Industrialized Buildings

The 2021 International Building Code (IBC) references the 2016 edition of ASCE 7. During the 2021 Viriginia Code Development Cycle a code change proposal was approved that resulted in the 2021 Virginia Uniform Statewide Building Code (USBC) referencing the 2022 edition of ASCE 7 (See 2021 VCC, Chapter 35). The purpose of this memorandum is to provide additional information to assist in implementing this change.

The original intent of the 2021 code change proposal, in referencing ASCE 7-22, was to bring forth the tornado provisions included in the IBC. Unfortunately, there are other sections throughout the 2021 Virginia Construction Code (VCC) that reference ASCE 7, that were not updated as part of the proposal, to correlate with the 2022 edition of ASCE 7. DHCD has published the following errata to address the correlation issues between the 2021 VCC and ASCE 7-22 (incorrect section references, etc.):

https://www.iccsafe.org/wp-content/uploads/errata central/Errata-for-2021-VCC- 02 20 2024.pdf

https://www.iccsafe.org/wp-content/uploads/errata central/Errata-for-2021-VCC- 03 27 2024.pdf

We are aware that additional concerns remain, specifically related to determining snow loads. The ground snow loads set forth by the 2021 VCC are based on ASCE 7-16, which if used with the load combinations set forth by ASCE 7-2022, might result in underestimations.

While the State Building Codes Office (SBCO) within DHCD serves as the building official for Industrialized Buildings (IBs), the installation of IBs and site related work for IBs, such as foundations, installations, etc. falls under the purview of the local building department. As such,





we encourage you to reach out to the local building departments to discuss their policies and requirements regarding ASCE 7.

Some local building departments in Virginia have issued policies specific to this issue. Some policies allow for designs based on the 2021 VCC snow loads but require such designs to comply entirely with ASCE 7-16; while other jurisdictions prohibit the use of snow loads set forth by the VCC and require designs to fully comply with ASCE 7-2022, including the snow loads prescribed by the standard. All of the policies that we are aware of prohibit mixing provisions based on different editions of the standards.

When designing and constructing an IB under the 2021 Industrialized Building Safety Regulations (IBSR), our office recommends and approves utilizing ASCE 7-22; however, we will also allow use of ASCE 7-16 when approved by the local building department in the jurisdiction where the building or structure will be installed. Mixing provisions of the VCC and/or different editions of the standard, such as snow loads prescribed by the 2021 IBC/VCC (which are based on ASCE 7-2016) in combination with ASCE 7-2022, is not allowed. If prior to commencing the building design you are unable to verify what the local building department will approve, the design should comply with ASCE 7-22.

The 2024 Virginia Code Development process is currently underway, and changes will be considered during the process to resolve this issue in the 2024 edition of the Virginia regulations.

If you have any questions regarding the information provided herein, please contact Brian Hilderbrand at 804-441-4538 or email at henry.hilderbrand@dhcd.virginia.gov.



