STANDARD

ANSI/ASHRAE/IES Addendum j to ANSI/ASHRAE/IES Standard 100-2018

Energy Efficiency in Existing Buildings

Approved by ASHRAE and the American National Standards Institute on November 30, 2023, and by the Illuminating Engineering Society on November 29, 2023.

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FOREWORD

Addendum j updates normative references within Standard 100-2018.

Informative Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum j to Standard 100-2018

Modify Section 10 as shown. The remainder of Section 10 is unchanged.

10. RESIDENTIAL BUILDINGS AND DWELLING UNITS

[...]

10.3.5 The EUI and energy target [. . .]

Informative Note: Residential *energy targets* listed in Tables 7-2a through 7-2d were derived from RECS 2005 2015 data and represents the 25th bottom (low energy) percentile of energy use by each *building* category.

[...]

Modify Section 11 as shown. The remainder of Section 11 is unchanged.

11. REFERENCES

- 1. ASHRAE. 2010. Performance Measurement Protocols for Commercial Buildings. <u>Peachtree Corners</u>, <u>GAAtlanta:</u> ASHRAE.
- ASH<u>R</u>AE. <u>2022</u>2013. ANSI/ASHRAE/IES Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings. <u>Peachtree Corners, GAAtlanta</u>: ASHRAE.
- ASHRAE. <u>2018</u>2007. ANSI/ASHRAE/<u>IES</u> Standard 90.2, Energy-Efficient Design of Low-Rise Residential Buildings. <u>Peachtree Corners, GAAtlanta</u>: ASHRAE.
- IES. <u>Lighting Design Criteria and Illumination Recommendations</u>. IES OL-IM-032011. Lighting Handbook, 10th Edition. New York: Illuminating Engineering Society.
- 5. ASHRAE. 2011. Procedures for Commercial Building Energy Audits, 2nd Edition. <u>Peachtree Corners</u>, <u>GAAtlanta:</u> ASHRAE.
- ACCA. <u>2019</u>2007. ANSI/ACCA Standard 4, *Maintenance of Residential HVAC Systems*. Arlington, VA: Air Conditioning Contractors of America.
- AHRI. <u>2023</u>2009. AHRI Guideline X, *Induced Draft Furnace Heat Exchanger Inspection*. Arlington, VA: Air Conditioning, Heating and Refrigeration Institute.
- ASHRAE. <u>2020</u>2013. ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy. <u>Peachtree Corners, GAAtlanta:</u> ASHRAE.
- 9. ASHRAE. <u>2022</u>2013. ANSI/ASHRAE Standard 62.1, *Ventilation for Acceptable Indoor Air Quality*. <u>Peachtree Corners, GAAtlanta:</u> ASHRAE.
- 10. IEA. 2009. IEA ECBCS Annex 46: Energy Process Assessment Protocol. International Energy Agency, Paris, France.

Modify Informative Annex I as shown. The remainder of Informative Annex I is unchanged.

INFORMATIVE ANNEX I BUILDING ENERGY MODELING

I1. BUILDING ENERGY MODELING

I1.1 General. [. . .]

<u>ANSI/ASHRAE/IES</u> Standard 90.1-2022 (versions 2004, 2007, and 2010) provides background modeling and simulation guidance in Appendix G, "Performance Rating Method."

[...]

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REFERENCES

ASHRAE. <u>2021</u>2005. ASHRAE Handbook–Fundamentals. <u>Peachtree Corners, GA</u>Atlanta: ASHRAE. ASHRAE. <u>2021</u>2006. ANSI/ASHRAE Standard 169, *Climatic Data for Building Design Standards*. <u>Peachtree Corners, GA</u>Atlanta: ASHRAE.

Table I-2 Design-Day Weather Data Sources

Weather File	Source
ANSI/ASHRAE Standard 169	(ASHRAE <u>2021</u> 2006)
ASHRAE Handbook–Fundamentals	(ASHRAE <u>2021</u> 2005)

Modify Informative Annex J as shown. The remainder of Informative Annex J is unchanged.

INFORMATIVE ANNEX J DERIVATION OF ENERGY INTENSITY TARGETS FOR STANDARD 100

[...]

REFERENCES

ASHRAE. <u>2021</u>2014. ANSI/ASHRAE Standard 105, Standard Methods of Determining, Expressing, and Comparing Building Energy Performance and Greenhouse Gas Emissions. <u>Peachtree Corners, GAAtlanta</u>: ASHRAE.

[...]

DOE. <u>2012</u>2003. Commercial building energy consumption survey (CBECS) U.S. Energy Information Administration, Washington, DC. Available at <u>www.eia.gov/consumption/commercial.</u> <u>www.eia.doe.gov/emeu/ebees.</u>

DOE. <u>2015</u>2005. Residential energy consumption survey (RECS) U.S. Energy Information Administration, Washington, DC. Available at <u>www.eia.gov/consumption/residential/data/2015.</u>www.eia.gov/consumption/residential.

[...]

Modify Informative Annex M as shown. The remainder of Informative Annex M is unchanged.

INFORMATIVE ANNEX M GUIDANCE ON BUILDING TYPE DEFINITIONS

Table M-1 lists subtypes for several *building* types/activities listed in Table 7-1. Observations in the 20122003 CBECS data are not identified at the subtype level. These subtypes provide examples of more specific *building* uses included within the types. The information used to develop this table was compiled from the CBECS website (EIA 2017) and communication between ORNL and the EIA.

[...]

REFERENCES

EIA. <u>2023</u>2017. Commercial Buildings Energy Consumption Survey (CBECS). Building type definitions. http://www.eia.gov/consumption/commercial/building-type-definitions.php

[...]

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ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

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