STANDARD

ANSI/ASHRAE/IES Addendum au to
ANSI/ASHRAE/IES Standard 90.1-2022

Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings

Approved by ASHRAE and the American National Standards Institute on October 31, 2024, and by the Illuminating Engineering Society on October 15, 2024.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (https://www.ashrae.org/continuous-maintenance).

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FOREWORD

Addendum au aligns how automated shading and dynamic glazing are modeled in Section 12 with Normative Appendix G, not giving credit for manual shading, but allowing permanently installed automatically controlled shading devices and dynamic glazing to be modeled. Performance properties of automatically controlled shading devices must be determined in accordance with AERC 1 from the Attachments Energy Rating Council. At the same time, Addendum au cleans up italicized terms in both Section 12 and Normative Appendix G.

This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost-effectiveness analysis.

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

Addendum au to Standard 90.1-2022

Modify Section 12 as shown (I-P and SI).

Table 12.5.1 Modeling Requirements for Calculating Design Energy Cost and Energy Cost Budget

Proposed Design (Column A) Design Energy Cost (DEC)	Budget Building Design (Column B) Energy Cost Budget (ECB)
[. . .]	
5. Building Envelope	
a. All components of the *building envelope* in the *proposed design* shall be modeled as shown on architectural drawings or as built for *existing building envelopes*. All *opaque building envelope* components shall be modeled accounting for thermal mass effects. **Exception to a:** The following *building* elements are permitted to differ from architectural drawings. [. . .] 6. ~~Manually operated~~ *Manual fenestration* shading devices, such as blinds or shades, shall ~~not~~ be modeled or not modeled the same as in the *budget building design*. *Permanently installed automatically* controlled *fenestration* shading devices shall be modeled. The performance of *automatically* controlled *fenestration* shading devices shall be determined in accordance with AERC 1. Permanent shading devices, such as fins, overhangs, and lightshelves, shall be modeled. 7. *Automatically* controlled *dynamic glazing* may be modeled. *Manual dynamic glazing* shall use the average of the minimum and maximum *SHGC* and *VT*.	[. . .] d. No shading projections are to be modeled~~.~~. *Manual fenestration* shading devices such as blinds or shades are not required to be modeled. *Automatically* controlled *fenestration* shading devices shall not be modeled. [. . .]
[. . .]	

Modify Normative Appendix G as shown (I-P and SI).

Table G3.1 Modeling Requirements for Calculating Proposed Building Performance and Baseline Building Performance

Proposed Building Performance	Baseline Building Performance
[. . .]	
5. Building Envelope	
a. All components of the *building envelope* in the *proposed design* shall be modeled as shown on architectural drawings or as built for *existing building envelopes*. All *opaque building envelope* components shall be modeled accounting for thermal mass effects. **Exception to a:** The following *building* elements are permitted to differ from architectural drawings: [. . .] 6. *Manual fenestration* shading devices, such as blinds or shades, shall be modeled or not modeled the same as in the *baseline building design*. Permanently installed a~~A~~*utomatically* controlled *fenestration* shades or blinds shall be modeled. The performance of *automatically* controlled *fenestration* shading devices shall be determined in accordance with AERC 1. Permanent shading devices, such as fins, overhangs, and light shelves shall be modeled. 7. *Automatically* controlled *dynamic glazing* may be modeled. ~~Manually controlled~~ *Manual dynamic glazing* shall use the average of the minimum and maximum *SHGC* and *VT*.	f. **Vertical Fenestration Assemblies.** *Fenestration* for new *buildings*, *existing buildings*, and additions shall comply with the following: [. . .] • *Manual* ~~window~~ *fenestration* shading devices such as blinds or shades are not required to be modeled. • ~~Automatic~~ *Automatically* controlled *fenestration* shading devices shall not be modeled.
[. . .]	

Modify Section 13 as shown (I-P and SI).

13. NORMATIVE REFERENCES

Reference		Section
[. . .]		
Attachments Energy Rating Council (AERC) 355 Lexington Ave 15th Floor New York, NY 10017		
AERC-1-2021	Procedures for Determining Energy Performance Properties of Fenestration Attachments	Table 12.5.1 Table G3.1
[. . .]		

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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.

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