ADDENDA

ANSI/ASHRAE/IES Addendum ab to
ANSI/ASHRAE/IES Standard 90.1-2013

Energy Standard for Buildings Except Low-Rise Residential Buildings

These addenda were approved by the ASHRAE Standards Committee on June 16, 2014; by the ASHRAE Board of Directors on October 3, 2014; by the Illuminating Engineering Society of North America on July 1, 2014and by the American National Standards Institute on March 2, 2015.

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FOREWORD

This addendum is to add a filled cavity metal building roof assembly to Appendix A.

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 ab to Standard 90.1-2013

Modify Table A2.3 as follows for I-P units.

TABLE A2.3 Assembly U-Factors for Metal Building Roofs

Insulation System	Rated R-Value of Insulation	Total Rated R-Value of Insulation	Overall U-Factor for Entire Base Roof Assembly	Overall U-Factor for Assembly of Base Roof Plus Continuous Insulation (Uninterrupted by Framing) — Rated R-Value of Continuous Insulation					
				R-5.6	R-11.2	R-16.8	R-22.4	R-28.0	R-33.6
...									
Filled Cavity with Thermal Spacer Blocks									
	R-19+R-10	29	**U-0.041**	0.033	0.028	0.024	0.021	0.019	0.017
	R-19+R-11	30	**U-0.037**						
...									

Modify Table A2.3 as follows for SI units.

TABLE A2.3 Assembly U-Factors for Metal Building Roofs

Insulation System	Rated R-Value of Insulation	Total Rated R-Value of Insulation	Overall U-Factor for Entire Base Roof Assembly	Overall U-Factor for Assembly of Base Roof Plus Continuous Insulation (Uninterrupted by Framing) — Rated R-Value of Continuous Insulation					
				R-1.0	R-2.0	R-3.0	R-4.0	R-5.0	R-6.0
...									
Filled Cavity with Thermal Spacer Blocks									
	R-3.3+R-1.8	5.1	**U-0.232**	0.189	0.159	0.138	0.121	0.108	0.098
	R-3.3+R-1.9	5.2	**U-0.21**						
...									

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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.

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The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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