



**BSR/ASHRAE/IES Addendum ci
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum ci to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

**First Public Review (April 2025)
(Draft Shows Proposed Changes to Current Standard)**

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FOREWORD

This addendum updates the Building Performance Factors (BPFs) that are used for determining compliance with Appendix G (see section 4.2.1.1). The BPFs represent the regulated energy savings of a design minimally compliant with the current edition of Standard 90.1 compared to design compliant with Appendix G PRM baseline requirements. The BPFs are updated each cycle to align with changes made to the prescriptive and mandatory requirements of the Standard as quantified by energy simulation using prototype building models approved by SSPC 90.1 (<https://www.energycodes.gov/prototype-building-models>).

Cost effectiveness

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 to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum ci to 90.1-2022

Revise Table 4.2.1.1 as follows:

Table 4.2.1.1 Building Performance Factor (BPF)

Building Area Type	Climate Zone																		
	0A	0B	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
Multifamily	0.69	0.68	0.71	0.70	0.72	0.72	0.71	0.76	0.63	0.69	0.76	0.71	0.66	0.72	0.71	0.65	0.67	0.65	0.67
Healthcare/hospital	0.69	0.69	0.70	0.68	0.67	0.65	0.65	0.66	0.64	0.64	0.66	0.63	0.67	0.65	0.65	0.66	0.67	0.68	0.70
Hotel/motel	0.66	0.66	0.69	0.65	0.65	0.64	0.64	0.65	0.65	0.63	0.65	0.63	0.62	0.63	0.62	0.61	0.62	0.59	0.58
Office	0.54	0.54	0.53	0.52	0.52	0.52	0.50	0.54	0.48	0.48	0.53	0.48	0.49	0.52	0.48	0.48	0.49	0.46	0.48
Restaurant	0.62	0.59	0.57	0.57	0.57	0.53	0.57	0.53	0.51	0.55	0.54	0.54	0.57	0.56	0.55	0.59	0.58	0.61	0.64
Retail	0.51	0.49	0.48	0.48	0.44	0.43	0.43	0.43	0.44	0.42	0.43	0.46	0.43	0.42	0.47	0.43	0.43	0.41	0.44
School	0.52	0.57	0.57	0.56	0.52	0.53	0.52	0.49	0.50	0.46	0.47	0.47	0.47	0.46	0.46	0.46	0.44	0.45	0.45
Warehouse	0.26	0.26	0.22	0.25	0.21	0.22	0.25	0.21	0.19	0.25	0.22	0.22	0.28	0.24	0.22	0.31	0.28	0.29	0.32
All others	0.62	0.60	0.62	0.59	0.55	0.51	0.53	0.52	0.55	0.53	0.52	0.55	0.53	0.53	0.56	0.54	0.54	0.54	0.54

Building Area Type	Climate Zone																		
	0A	0B	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
Multifamily	0.61	0.56	0.59	0.56	0.58	0.58	0.58	0.58	0.44	0.55	0.57	0.54	0.53	0.55	0.55	0.53	0.53	0.53	0.59
Healthcare/hospital	0.60	0.58	0.59	0.60	0.60	0.60	0.58	0.60	0.56	0.55	0.58	0.55	0.56	0.55	0.57	0.56	0.57	0.57	0.59
Hotel/motel	0.59	0.57	0.58	0.56	0.56	0.54	0.54	0.55	0.54	0.52	0.52	0.52	0.52	0.51	0.52	0.52	0.52	0.52	0.52
Office	0.48	0.47	0.46	0.47	0.42	0.45	0.41	0.45	0.39	0.40	0.43	0.40	0.41	0.43	0.41	0.42	0.42	0.40	0.43
Restaurant	0.58	0.55	0.56	0.55	0.55	0.54	0.59	0.55	0.53	0.59	0.56	0.58	0.62	0.59	0.61	0.63	0.60	0.65	0.69
Retail	0.42	0.42	0.39	0.41	0.35	0.36	0.34	0.34	0.34	0.35	0.36	0.37	0.38	0.37	0.38	0.37	0.37	0.38	0.42
School	0.44	0.45	0.43	0.45	0.41	0.44	0.44	0.40	0.37	0.37	0.38	0.38	0.38	0.39	0.38	0.38	0.37	0.39	0.42
Warehouse	0.24	0.26	0.22	0.24	0.20	0.22	0.24	0.21	0.18	0.24	0.21	0.22	0.28	0.24	0.22	0.31	0.28	0.29	0.32
All others	0.53	0.52	0.50	0.51	0.44	0.43	0.44	0.43	0.42	0.44	0.42	0.44	0.43	0.43	0.46	0.44	0.44	0.46	0.48