

**ERRATA SHEET FOR
ANSI/ASHRAE STANDARD 90.2-2024
High-Performance Energy Design of Residential Buildings**

September 23, 2025

The corrections listed in this errata sheet apply to ANSI/ASHRAE/IES Standard 90.2-2024 edition. The first printing is identified on the outside back cover of the standard as “Product code: 86929 8/24”. Shaded items have been added since the previously published errata sheet dated December 9, 2024 was distributed.

Page(s)	Erratum
16	<p>7.3.6 Material Emissions in Dwellings. Revise Section 7.3.6 as shown below. (Note: Additions are shown in <u>underline</u> and deletions are shown in strikethrough.)</p> <p>7.3.6 Material Emissions. Dwellings shall be constructed with materials meeting the requirements of Sections 6.1 through 6.5. <u>Dwellings shall be constructed with materials meeting the requirements of Sections 6.1 Composite Wood; 6.2 Interior Paints, Finishes, and Coatings; 6.3 Carpets and Cushions; 6.4 Adhesives and Sealants; 6.5 Hard Surface Flooring; 6.6 Gypsum Board; and 6.7 Insulation of Indoor airPLUS New Construction (IAP-NC) Specifications Version 2.</u></p> <p>Informative Note: Guidance from the U.S. Environmental Protection Agency on identifying products that are compliant with these specifications, including the identification of product certification and labeling programs that are acceptable, can be found online.^{L3}</p>
18	<p>7.4.3.3 Maximum Volume. Revise Section 7.4.3.3 to change “0.125 gal (4.73 L)” to “0.125 gal (0.473 L)” as shown below. (Note: Additions are shown in <u>underline</u> and deletions are shown in strikethrough.)</p> <p>7.4.3.3 Maximum Volume. The maximum volume between the nearest source of hot water and the plumbing fixture or appliance shall not exceed 0.125 gal (<u>0.473</u> 4.73-L). The volume shall be the sum of the internal volumes of pipe, fittings, valves, meters, and manifolds between the nearest source of hot water and the termination of the fixture supply pipe. The volume contained within fixture shutoff valves, within flexible water supply connectors to a fixture fitting, and within a fixture fitting shall not be included in the water volume determination. Where hot water is supplied by a recirculating system or heat-traced piping, the volume shall include the portion of the fitting on the branch pipe that supplies water to the fixture. The maximum length of a branch containing a single pipe diameter shall be determined by Table 7-5. The maximum length of branch piping containing more than one pipe diameter shall be based on the volume contained in each segment such that the combined volume does not exceed 0.125 gal (<u>0.473</u> 4.73-L).</p>
	Table 7-1 Envelope Component Maximum SHGC and U-Factors. Add dividing line between portions of the table as shown in red.

Table 7-1 Envelope Component Maximum SHGC and U-Factors (I-P)

Climate Zone	Maximum SHGC	Maximum U-factors							
	Glazed Fenestration	Fenestration	Skylights	Ceilings	Frame Walls	Mass Walls	Floors	Basement Walls	Crawlspace Walls
0	0.30	1.2	0.75	0.035	0.082	0.197 ^a	0.064	0.360	0.477
1	0.30	1.2	0.75	0.035	0.082	0.197 ^a	0.064	0.360	0.477
2	0.30	0.65	0.75	0.035	0.082	0.165 ^a	0.064	0.360	0.477
3	0.30	0.50	0.65	0.035	0.082	0.141 ^a	0.047	0.091 ^b	0.136
4 except Marine	NR	0.35	0.60	0.030	0.082	0.141 ^a	0.047	0.059	0.065
Marine 4 and 5	NR	0.35	0.60	0.030	0.057	0.082	0.033	0.059	0.065
6	NR	0.35	0.60	0.026	0.057	0.060	0.033	0.050	0.065
7	NR	0.35	0.60	0.026	0.057	0.057	0.033	0.050	0.065
8	NR	0.35	0.60	0.026	0.057	0.057	0.033	0.050	0.065

a. Where greater than half of a *mass wall's* insulation is on the interior, the maximum U-factor shall be as follows: 0.170 in Climate Zones 0 and 1, 0.140 in Climate Zone 2, 0.120 in Climate Zone 3, and 0.100 in Climate Zone 4 except Marine.

b. The required U-factor is 0.360 for warm-humid locations as defined by Figure R301.1 and Table 301.1 in the IECC.³

Table 7-1 Envelope Component Maximum SHGC and U-Factors (SI)

Climate Zone	Maximum SHGC	Maximum U-factors							
	Glazed Fenestration	Fenestration	Skylights	Ceilings	Frame Walls	Mass Walls	Floors	Basement Walls	Crawlspace Walls
0	0.30	6.82	4.26	0.20	0.47	1.12 ^a	0.36	2.04	2.71
1	0.30	6.82	4.26	0.20	0.47	1.12 ^a	0.36	2.04	2.71
2	0.30	3.69	4.26	0.20	0.47	0.94 ^a	0.36	2.04	2.71
3	0.30	2.84	3.69	0.20	0.47	0.80 ^a	0.27	0.52 ^b	0.77
4 except Marine	NR	1.99	3.41	0.17	0.47	0.80 ^a	0.27	0.34	0.37
Marine 4 and 5	NR	1.99	3.41	0.17	0.32	0.47	0.19	0.34	0.37
6	NR	1.99	3.41	0.15	0.32	0.34	0.19	0.28	0.37
7	NR	1.99	3.41	0.15	0.32	0.32	0.19	0.28	0.37
8	NR	1.99	3.41	0.15	0.32	0.32	0.19	0.28	0.37

a. Where greater than half of a *mass wall's* insulation is on the interior, the maximum U-factor shall be as follows: 0.170 in Climate Zones 0 and 1, 0.140 in Climate Zone 2, 0.120 in Climate Zone 3, and 0.100 in Climate Zone 4 except Marine.

b. The required U-factor is 2.04 for warm-humid locations as defined by Figure R301.1 and Table 301.1 in the IECC.³

Table 7-3 Common Area Component Requirements. Add dividing line between portions of the table as shown in red.

Table 7-3 Common Area Component Requirements (I-P)

Maximum SHGC			Maximum U-Factors								
Climate Zone	Glazed		Fenestration	Skylights	Interior		Interior Framed Walls ^a	Exterior Framed Walls ^b	Exterior Mass Walls ^b	Interior Floor ^a	Exterior Floor ^b
	Fenestration	Skylights			Ceiling ^a	Ceiling ^b					
0	0.23	0.23	0.32	0.50	0.080	0.032	0.080	0.076	0.177	0.080	0.058
1	0.23	0.23	0.32	0.50	0.080	0.032	0.080	0.076	0.177	0.080	0.058
2	0.23	0.23	0.32	0.50	0.080	0.027	0.080	0.076	0.149	0.080	0.058
3	0.23	0.23	0.28	0.40	0.080	0.027	0.080	0.054	0.088	0.080	0.042
4 except Marine	0.25	0.25	0.25	0.40	0.080	0.023	0.080	0.054	0.088	0.080	0.042
Marine 4 and 5	0.30	0.30	0.22	0.40	0.080	0.023	0.080	0.054	0.074	0.080	0.030
6	0.45	0.45	0.22	0.40	0.080	0.023	0.080	0.041	0.054	0.080	0.030
7	0.45	0.45	0.22	0.40	0.080	0.023	0.080	0.041	0.051	0.080	0.025
8	NR	NR	0.22	0.40	0.080	0.023	0.080	0.041	0.051	0.080	0.025

a. Interior components are those that separate a *common area* from a sleeping or dwelling unit.
b. Exterior components are those that are part of the *building thermal envelope*.

Table 7-3 Common Area Component Requirements (SI)

Maximum SHGC			Maximum U-Factors								
Climate Zone	Glazed		Fenestration	Skylights	Interior		Interior Framed Walls ^a	Exterior Framed Walls ^b	Exterior Mass Walls ^b	Interior Floor ^a	Exterior Floor ^b
	Fenestration	Skylights			Ceiling ^a	Ceiling ^b					
0	0.23	0.23	1.82	2.84	0.45	0.18	0.45	0.43	1.01	0.45	0.33
1	0.23	0.23	1.82	2.84	0.45	0.18	0.45	0.43	1.01	0.45	0.33
2	0.23	0.23	1.82	2.84	0.45	0.15	0.45	0.43	0.85	0.45	0.33
3	0.23	0.23	1.59	2.27	0.45	0.15	0.45	0.31	0.50	0.45	0.24
4 except Marine	0.25	0.25	1.42	2.27	0.45	0.13	0.45	0.31	0.50	0.45	0.24
Marine 4 and 5	0.30	0.30	1.25	2.27	0.45	0.13	0.45	0.31	0.42	0.45	0.17
6	0.45	0.45	1.25	2.27	0.45	0.13	0.45	0.23	0.31	0.45	0.17
7	0.45	0.45	1.25	2.27	0.45	0.13	0.45	0.23	0.29	0.45	0.14
8	NR	NR	1.25	2.27	0.45	0.13	0.45	0.23	0.29	0.45	0.14

a. Interior components are those that separate a *common area* from a sleeping or dwelling unit.
b. Exterior components are those that are part of the *building thermal envelope*.