

**WAC 51-11C-61051 Section A105.1—General.**

**A105.1 General.** Tables A105.1(1), A105.1(2) and A105.1(3) list heat loss coefficients for floors over unconditioned spaces in units of Btu/h • ft<sup>2</sup> • °F.

They are derived from procedures listed in the ASHRAE Fundamentals Handbook, assuming an average outdoor temperature of 45°F, an average indoor temperature of 65°F and a crawlspace area of 1350 ft<sup>2</sup> and 100 feet of perimeter. The crawlspace is assumed to be 2.5 feet high, with 24 inches below grade and 6 inches above grade.

**Table A105.1(1)  
Default U-factors for Wood-Framed Floors  
over Vented Crawlspace or  
Unheated Basement**

Nominal R-value		U-factor	
Floor	Perimeter	Post & Beam	Joists
0	0	0.112	0.134
	11	0.100	0.116
	19	0.098	0.114
	30	0.093	0.107
11	0	0.052	0.056
	11	0.048	0.052
19	0	0.038	0.041
	11	0.036	0.038
22	0	0.034	0.037
	11	0.033	0.035
25	0	0.032	0.034
	11	0.031	0.033
30	0	0.028	0.029
	11	0.027	0.028
38	0	0.024	0.025
	11	0.024	0.024

**Table A105.1(2)  
Default U-factors for Wood-Framed Floors over Heated Plenum Crawlspaces**

Nominal R-value Perimeter	U-factor
11	0.085
19	0.075
30	0.069

Note: Crawlspaces used as heated plenums have approximately 30 percent higher heat loss rate than unvented crawlspaces with the same assumed ACH. Default U-factors in Table A105.1(2) reflect this higher rate of heat loss.

**Table A105.1(3)  
Default U-factors for Exposed Floors**

Nominal R-value	U-factor		
	Concrete	Wood Joist	Metal Joist
R-11	0.077	0.088	0.14
R-15	0.059	0.076	0.12
R-19	0.048	0.062	0.11
R-21	0.043	0.057	0.11
R-25	0.037	0.051	0.10

Nominal R-value	U-factor		
	Concrete	Wood Joist	Metal Joist
R-30	0.031	0.040	0.09
R-38	0.025	0.034	0.08

[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-61051, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-61051, filed 2/1/13, effective 7/1/13.]