

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 $\text{Btu}/\text{h} \cdot \text{ft}^2 \cdot {}^\circ\text{F}$.

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^2 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 Crawlspace

| 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.]